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W. GROSSMANN & SON

OCT 30 1916
U.S. Department of Agriculture

HIGH GRADE SEEDS

Bonnie Best
Tomato

1916

57/6
57/5

"The
Petersburg
Seed House"

13-15 Bollingbrook St.
PETERSBURG -- VA.

VEGETABLE PLANTS

In season, we will have full supplies of all varieties of vegetable plants as listed below, grown from our own selected seeds on our own seed farm in Chesterfield County, and we will be in position to fill all orders promptly with well-grown, stocky plants. All orders carefully packed and delivered at express office, our city.

CABBAGE PLANTS.—Early varieties ready February, March and April. Late varieties ready June and July. Early varieties for Fall planting ready October and November. Price, per 100, 25c. Per 1,000, \$1.50. In 5,000 lots, \$1.25 per 1,000.

TOMATO PLANTS.—Ready April, May, June and July. Transplanted and hardened plants in individual pots, 30c. per dozen; \$2.00 per 100. Transplanted plants in cold frames, 20c. per dozen; \$1.50 per 100. Hotbed plants, 75c. per 100; \$3.50 per 1,000.

CELERY PLANTS.—Ready June to August. 40c. per 100. \$3.00 per 1,000.

LETTUCE PLANTS.—Ready February to April, September to November. 25c. per 100. \$1.50 per 1,000.

EGG PLANTS.—Ready May and June. Hardened and transplanted in individual pots. 40c. per dozen.

PEPPER PLANTS.—Ready May and June. Hardened and transplanted in individual pots. 30c. per dozen. Cold frame plants, 20c. per dozen. \$1.25 per 100.

SWEET POTATO PLANTS.—Ready May and June. 20c. per 100. \$1.50 per 1,000.

RHUBARB ROOTS.—Strong, healthy roots. 10c. each. \$1.00 per dozen.

BULBS FOR SPRING PLANTING

Caladiums, or Elephant's Ear.—Very effective for beds or groups, especially in lawns. Grows from 6 to 8 feet high, bearing immense green leaves. Price large sized, sound, healthy bulbs, 10c each; \$1.00 per dozen by express or parcels post prepaid.

Cannas.—Georgous and effective bedding plants. Used for round beds or borders. Mixed or in separate colors. All leading varieties.

Healthy, strong roots 10c each; 4 for 25c; 75c per dozen, per parcels post prepaid.

Gladiolas.—Very showy and popular summer flowers. Mixed colors. Per doz., 25c; per 100, \$1.50 per parcels post prepaid.

Dahlia Roots.—We furnish these in mixed colors or separate colors of choice named varieties. Price: 15c each for large healthy roots; \$1.50 per dozen.

Excelsior Pearl Tuberose.—Desirable for their beauty and delightful fragrance. Price per doz., 20c; per 100, \$1.00 per parcels post prepaid.

WRITE FOR OUR PRICES ON

Virginia Nursery Stock—Fruit Trees, Shade Trees, Evergreen Hedge Plants, Strawberry Plants, etc.

INSECTICIDES

PARIS GREEN.—Very effectual for destroying potato bugs and other insects. A very strong poison, and should be used carefully. Mix one pound Paris Green to 50 pounds of Plaster, or to 150 gallons of water.
 $\frac{1}{4}$ lb. pkg.....10c $\frac{1}{2}$ lb. pkg.....15c 1 lb. pkg.....25c

POWDERED ARSENATE OF LEAD.—This is undoubtedly the best insecticide known. Recommended for spraying potatoes, vegetables, tobacco, etc. Does not burn foliage. Especially recommended to our tobacco growers. Can be used as a powder or in water. Easily handled and applied.

1 lb. package.....40c 5 lb. package.....\$1.50

BORDEAUX MIXTURE.—This is a splendid insecticide as well as a promoter of growth to plants. Especially recommended for spraying tomatoes and other delicate plants. Should be used by all truckers and gardeners. To be diluted 10 to 20 times with water, and used as a spray.

1 lb. jars.....25c 2 lb. jars.....40c
 5 lb pkg.....75c 25 lb. keg.....\$2.75

HAMMOND'S SLUG SHOT.—A very effective insecticide and very popular on account of not being injurious to human beings. Recommended for roses and other flowers.

1 lb. pkg.....10c 5 lb. pkg.....25c 10 lb. pkg.....50c

TOBACCO DUST.—Splendid for dusting of melons, cukes, squash and other vegetables. Destroys insects and acts as a fertilizer.

3 lb. pkg.....15c 10 lb. pkg.....25c

LIME AND SULPHUR SOLUTION.—For spraying fruit trees and all nursery stock. Destroys San Jose scale, and all diseases peculiar to trees. Every man with a tree should spray certainly twice a year with Lime and Sulphur. One gallon will make 12 gallons of spray.

1 gallon jug.....50c 5 gallon jug.....\$2.00
 10 gallon jug.....\$3.50 Bbl. of 50 gals.....\$11.00

CONKEY'S FLY KNOCKER.—A splendid preparation for keeping flies from cattle and horses.

1 qt. can.....35c Per gallon.....\$1.00

To Our Friends and Customers

WE TAKE PLEASURE in handing you herewith our Annual Catalogue for 1916. The year 1916 marks our thirty-fifth year as "*THE SEEDSMEN OF PETERSBURG*," and we are both pleased and proud to see how our business has steadily and continuously grown and increased in volume, and how it continues to grow, carrying with it the friendship and patronage of our old customers, and adding new friends year by year. A true *SEEDSMAN IS BORN, NOT MADE*, and we attribute our success and the confidence placed in us by our customers to the fact that our business was founded on our fundamental knowledge, both practical and theoretical, of plants and plant life, on which solid foundation we have continued to build our business through thirty-five years of experience and experiments, keeping pace with the rapid and far-reaching developments and improvements, in the Agricultural and Horticultural fields of the world.

Our intimate knowledge of the Seed Business, acquired through these years of work and study, qualifies us to render invaluable service to our friends and customers, and the hundreds and thousands of letters which we are receiving soliciting our views and suggestions regarding different points and phases relative to the tilling of soils and agricultural pursuits in general, makes us feel that our efforts to further the interests of the farmer have been, and are being, appreciated.

Combining our service with *SEEDS* high in *QUALITY, PURITY* and *GERMINATION*, we stand ready to serve our friends and the trade in general for every want and need of the **FARMER, GARDENER, TRUCKER** and **AGRICULTURIST** for the coming season, and we are prepared to serve you faithfully and conscientiously.

We extend thanks to you for your patronage during the past, and we respectfully ask the privilege of serving you during the coming season.

With best wishes for a Prosperous New Year, we are,

Very truly yours,

W. GROSSMANN & SON

"THE SEEDSMEN OF PETERSBURG"

IMPORTANT NOTES AND SUGGESTIONS

HOW TO SEND MONEY. Remittances should be made either in the form of an Express Money Order, P. O. Money Order, Bank Draft, or Registered Letter. Postage stamps will be accepted for small amounts, provided they are carefully wrapped so as to prevent sticking.

Be Sure to Give Full Name and Address with each order. Every season we get a number of orders without name of sender or Post Office, and the postmark on the envelope is often too obscure to be made out. There is no way of finding out who the senders are, consequently we are blamed, whereas the fault is their own entirely. We therefore beg our correspondents to write their name and full address on each order.

SEEDS BY EXPRESS. By special agreement, the Express Companies will carry Seeds from Petersburg to all points at an average rate of about 20 per cent. less than the usual merchandise rate, and a package weighing 5 pounds or less will be delivered to any Express Office in the State of Virginia, for 25 cents when prepaid. Goods wanted C. O. D. by express must have 25 per cent. of the amount accompany the order. We cannot ship C. O. D. by freight.

ORDERS FROM UNKNOWN CORRESPONDENTS.—Customers who have no regular accounts with us will kindly remit the amount with their order, or name business reference, as customary before opening new accounts.

We Make No Charge for Drayage or delivery of goods to any railroad station, steamship line or express office in Petersburg. Cotton sacks only are charged for at cost. 2½ bushel Cotton Sacks are 20 cents each. All grass seed bags, excepting bags for Timothy, Herds Grass, and Clover are furnished free.

CLAIMS. All claims for shortage, loss or damage to shipments, must be made promptly upon receipt of goods, otherwise we cannot allow such claims.

REMEMBER. Our packets of seed are large and well filled, and should not be confused with the 2½ cent and 3 cent size packets sold by some dealers.

CHANGE OF ADDRESS. Should any of our customers change their Post Office address, we would be glad if they would advise us. It also sometimes happens that our customers receive two Catalogues; should you receive two, we would thank you to hand one to some friend who does not get one, and notify us, so that we may make the correction in our directories.

PRICES ON FIELD SEEDS, ONION SETS AND POTATOES are constantly fluctuating. The prices given in this Catalogue are those ruling January 1, 1916. But they may change at any time. We will cheerfully quote prices at any time on request, and we will always fill orders entrusted to us at the lowest prices possible for the best quality seeds.

ABOUT WARRANTING SEEDS. We exercise the greatest possible care in growing or buying, in examining, in testing, and in every department of the business to guard against mistakes and insure reliability, yet no Seedsman can, or ever does in good faith assume any responsibility for crops grown from seeds supplied by them, therefore in common with other responsible Seed Houses, we sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, and all orders sent us will be filled under these conditions only. We give no warranty, express or implied, as to description, purity, productiveness, or any other matter of any seeds, bulbs, or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

We pay postage on all orders for Vegetable Seeds in packages, ounces, and ¼ lb., at Catalogue prices.

Parcels Post Rates for Seeds

SIMPLE RULES FOR ORDERING BY PARCEL POST.

Parcel Post Rates. All Seeds, Plants, Bulbs, Roots, Poultry Supplies, Insecticides, etc., can now be sent throughout the United States by Parcel Post. On weights of more than half pound, the pound rate shown in Parcel Post Table will apply. Parcels weighing half pound or less, the rate is 1c for each 2 ounces or fraction thereof regardless of distance. The points further than the Second Zone on weights of over 10 pounds the charge by freight or express is usually more economical.

POSTAGE RATE TABLE FOR PARCEL POST PACKAGES.

Ask your Postmaster or Rural Letter Carrier to tell you what zone you are in from Petersburg, Va., then refer to the table and you will know how much postage to send for mailing.

	First Pound or Fraction.	Each Additional Pound or Fraction.
Local Rate	5c	1c
First Zone, within 50 miles from Petersburg, Va.....	5c	1c
Second Zone, 50 to 150 miles from Petersburg, Va.....	5c	1c
Third Zone, 150 to 300 miles from Petersburg, Va.....	6c	2c
Fourth Zone, 300 to 600 miles from Petersburg, Va.....	7c	4c
Fifth Zone, 600 to 1,000 miles from Petersburg, Va.....	8c	6c
Sixth Zone, 1,000 to 1,400 miles from Petersburg, Va.....	9c	8c
Seventh Zone, 1,400 to 1,800 miles from Petersburg, Va.....	11c	10c
Eighth Zone, all over 1,800 miles from Petersburg, Va.....	12c	12c

GARDEN AND FARM CALENDAR

JANUARY.

This month is generally a period of rest for the farmer, but a wideawake man will realize that it is also the beginning of a busy Spring season, and will make preparation to push ahead the moment work begins. He will prepare hotbeds, prune trees and grape vines, top dress asparagus, haul all the manure he can get, and plow as much land as possible; get ready for the coming season and make out a list of seeds wanted for the Spring.

FEBRUARY.

If weather opens get ready for the early crops. Remember that VERY EARLY and VERY LATE crops bring the most money. Sow cabbage, tomato, lettuce and beet seed in hotbeds for transplanting, also sow a few early radish in same.

Toward the end of the month sow out doors early peas, spinach, and Spring kale; plant onion sets and lettuce plants. Prepare lawns and sow lawn grass, sow Winter oats and all grass and clover seeds, also rye for grazing; sow Canada peas.

MARCH.

Outdoor work begins this month. Select light mellow soils with Southern exposure for earliest crops; sow all kinds of garden peas, radish, beets; also parsnips, carrots, spinach, parsley, asparagus and salsify; transplant cabbage, tomato and lettuce plants; sow in hotbeds pepper, eggplant and tomato seed. Make watermelon hills, plant Irish potatoes, asparagus and onion sets, sow Spring kale, spinach and mustard.

APRIL.

Most all crops can be sown this month; if not already done, sow peas, onions, radishes, asparagus, beets, carrots, parsley, parsnips, salsify. Bear in mind that to be a successful gardener you must have a supply of fresh vegetables during the whole season, and to accomplish this seeds should be sown in succession. Sow celery seed in a finely prepared moist bed.

Sow all kinds of Herbs. Plant Snaps, early Corn, set out Tomato, Cabbage, Lettuce and Pepper plants. Plant Irish Potatoes; prepare your land for Potatoes well, and buy only the choice, selected stock for seed, as this is a very important crop. We recommend the use of fertilizer in the place of too much manure for this crop.

Bed Sweet Potato plantings. Late in the month sow Mangel Wurzel for stock. Begin planting Corn crop. Sow extra early Black-Eye Peas for market. Melons, Squash and Cucumbers can be sown, but with some risk.

MAY.

All tender plants can be sown this month. Plant Pole Beans, Snaps, Butter Beans, Sugar Corn, Melon, Squash, Cucumber, Pumpkin, Okra, and Salsify. Set out Tomato, Pepper, Eggplants and Lettuce Plants. Sow Tomato and Cabbage seed for late crop.

Set out Sweet Potato Plants, sow Millet and Cowpeas mixed for feed. This mixture yields large crops of hay and improves the land. Sow Kaffir Corn, Sugar Corn, Black-Eye Peas, Soja Beans, Navy Beans and Buckwheat. Finish planting Corn, also Cotton and Peanuts. Sow Cowpeas for fallowing.

JUNE.

Summer has now opened, and farmers can push ahead without fear of frost. Continue sowing and planting all varieties of vegetables to have them come in succession, always having something for the market and table. Sow Cabbage and Tomato seed for the late crop. Plant Sugar Corn for late roasting ears, also Water and Musk Melons; also Cucumbers for Pickles. Prepare for late Potatoes. Sow Beets and Pumpkins for stock food for winter. If stand of Corn crop is poor, replant with early Yellow Corn, such as Early Learning or Early Dent. Sow Cowpeas and Millet for hay; also Kaffir Corn for chicken feed and fodder. Gather Onion crop if dry enough.

Toward end of month plant late Potatoes when suitable season offers. Plant second crop of Snaps, Butter Beans, etc.

Plant Navy Beans and Black-Eye Peas for Winter use. Keep Celery bed well weeded, as the plants are very easily killed by weeds.

Prepare land well for Celery by filling trenches with well rotted manure, mix thoroughly with soil and form even beds, selecting a moist bottom with heavy Chocolate loam.

JULY.

All seeds not already sown should be put in at once. Continue planting early Corn and Snaps of all kinds for late marketing. German Millet can be sown on good land. Plant out Celery plants, and if weather gets dry cover bed with fine manure to retain moisture. Also plant out late Cabbage and Tomato plants. Sow Rutabaga and early varieties of Turnips.

Finish planting late Potatoes and keep a good lookout for bugs, as they are very hard on late Potatoes. Dust with Paris Green and Slugshot at first sign of bugs. Corn can still be drilled to make fodder. Throughout the entire season your land should be kept well stirred and loosened, by continual cultivating, as the moisture is better retained. If the weather should continue dry, make frequent use of your roller.

AUGUST.

This is the month for the beginning of sowing of Fall crops. Sow all varieties Turnip seeds, also Spinach and Kale. Begin sowing German Clover; sow German Clover and Turnips together, thereby making two crops on the same land.

Cultivate well your late Potatoes and keep the bugs down. Throw a furrow or two to the Celery to get fresh moist soil next to the plants.

Turn under Cowpeas and sow a fall crop on same land. Harvest all crops matured and prepare land for next crop.

SEPTEMBER.

Preparation for Winter crops should begin in earnest now by all means; sow as much German Clover as possible, as no other crop is of more benefit to the farmer. If your Corn crop is cultivated level, it can be sown in the cornfield either for early feed in the Spring or for fallowing, making a good fertilizer. Gather in all crops that are ready for harvest. Sow Turnips, Kale and Spinach.

Sow Cabbage seeds for plants for Spring crop about the 21st of the month. Set out Potato Onion sets; sow Winter Oats, and begin sowing Grass and Clover. Rye and Wheat can also be sown. Hill up the Celery; save all hay and feed you can, so as not to run short in Winter.

OCTOBER.

This is about the last month any sowing should be done. Continue sowing German Clover whenever you can. A farmer's first thought should be plenty of feed for his stock; his second, how to improve his land. German Clover furnishes excellent feed in Spring when other feeds run low, and also makes a very valuable fertilizer when turned under. Gather in all crops that may still be out. Sow Winter Oats, Wheat, Grass and Clover and Rye. Plant out Cabbage plants for Spring. Plant out Trees, Vines and Strawberry plants.

NOVEMBER.

If behind time, still sow Wheat, Rye, Oats, Grass and Clover. Prepare compost heaps for Spring, and plow up all the land you can, to allow it to freeze out well during winter. Look to your lawns; sow Lawn Grass and protect it from the cold.

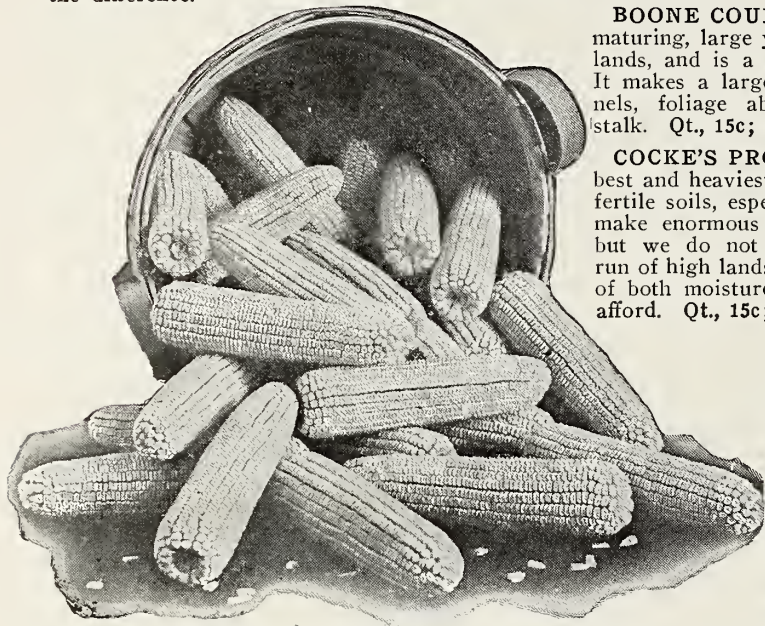
See that your stock is well and warmly housed, have plenty bedding, and protect your buildings in general; gather up all tools and farming implements and shelter them from the weather.

DECEMBER.

Farm work proper is over for the year. You should continue plowing and adding compost heaps. The main attention should be given to your stock; see that stables are warm, and attend to the feeding yourself. Repair buildings, implements and fences. Have everything in good order, and you will be able to enjoy the joyous Christmas-tide.

VIRGINIA-GROWN SEED CORNS

Our stocks of Seed Corn are all Virginia grown, planted and raised especially for seed purposes, carefully selected, nubbed, fanned and graded, and will meet the requirements of the most fastidious corn grower. We have given our careful, personal attention to the selection of our SEED CORN, and we request all of our customers who really want good seed corn to call on us for samples, which we will gladly send free of charge, to compare with the general run of seed corn. While our prices may be a little higher, comparison will convince you that our stocks are worth the difference.



BOONE COUNTY WHITE.—This is an early maturing, large yielding variety, suitable for uplands, and is a great favorite in some sections. It makes a large, well-filled ear with deep kernels, foliage abundant, good, strong growing stalk. Qt., 15c; pk., 60c; bu., \$2.00.

COCKE'S PROLIFIC.—Considered one of the best and heaviest yielding varieties, and on good fertile soils, especially river low grounds, it will make enormous yields of both grain and feed, but we do not recommend it for the general run of high lands, as it requires a greater amount of both moisture and fertility than our uplands afford. Qt., 15c; pk., 60c; bu., \$1.75.

MAMMOTH TWIN.—This is a fine upland corn, lately introduced by us in this section, and those who have given it a trial are greatly pleased with it. The ears are very large, kernels deep and broad, rather large cob, vigorous, upright growing stalk, with broad, abundant fodder. As the name implies, it is a two-ear corn, from 50 to 70 per cent, producing two well filled ears to each stalk, with rarely a barren stalk in the entire field. Qt., 20c; pk., 75c; bu., \$2.00.

BLOUNT'S PROLIFIC.—This is one of the best prolific varieties grown, yielding from 3 to 4 well filled ears of excellent quality to each stalk. It is well adapted to our improved highlands, producing heavy yields of corn, as well as an abundance of foliage. Especially recommended for late planting, being quick in growth and early maturing. Price per qt., 15c; pk., 60c; bu., \$2.00.

VIRGINIA WHITE DENT.—This is the old standard variety grown throughout Virginia. Makes large ears, deep grain and rather small cob, with heavy growth of stalk and fodder, making it also a very valuable ensilage corn. Our stock is grown by one of the most careful and successful James River farmers, and will be found true to name and of very high germinating power. Qt., 15c; pk., 50c; bu., \$1.50.

"POOR LAND" CORN.—This is not a pure bred corn, but a cross between Hickory King and Shoe Peg; and the result has given us a splendid corn for general purposes. The corn retains partly the prolific quality of Hickory King and the size of ear and depth of grain of the Shoe Peg, and has gained its name through the fact that it will produce a good crop of well filled ears on the general run of our high lands, and give good results where most other varieties would practically fail. Qt., 15c; pk., 50c; bu., \$1.50.

COLLIER'S EXCELSIOR.—Similar in character to Boone County, but harder and not inclined to rot as easily. Generally considered a better corn than the Boone County. Qt., 15c; pk., 60c; bu., \$2.00.

VIRGINIA ENSILAGE.—This corn makes a larger growth and more fodder than any other variety grown, and is largely planted, both North and South, for ensilage, for which purpose it is unequalled. Qt., 15c; pk., 50c; bu., \$1.50.

CASEY'S THOROUGHbred.—This splendid corn is fast becoming a leader in Virginia. It is a pure white, deep grain corn, of very attractive appearance, generally bearing two well filled ears to the stalk, and is a sure crop producer. Casey's Thoroughbred has been thoroughly tested in this territory, and we unhesitatingly recommend it to our customers for general purposes and as a prize winner. Price per qt., 15c; pk., 60c; bu., \$2.

HICKORY KING.—A good corn well adapted to our thin uplands, bearing three to four solid ears to each stalk. The grain is large and broad, and cob so small that a grain of the corn will completely cover the end of it. While the ears are not large enough to place this corn in the heavy yielding class, it will give better results on poor lands than any other variety. Qt., 15c; pk., 60c; bu., \$2.00.

EUREKA.—This corn is bred from the Cocke's Prolific, has larger and longer ears, but not as many to the stalk. Is considered one of the best ensilage corns for good rich bottom lands, where it will grow from 14 to 16 feet with an abundance of fodder and heavy yield of corn. This corn is extensively used throughout the North and West for ensilage. We do not recommend it for thin land. Price per qt., 15c; pk., 50c; bu., \$1.75.

Yellow Varieties

IMPROVED GOLDEN DENT.—This well known and popular corn yields from two to three ears of deep golden-yellow grain, does well under general conditions, and on account of its early maturity and nutritious quality has become a very valuable corn throughout the South, especially for late planting, as it can be put in successfully after the season is too far advanced for the white varieties. Per qt., 15c; pk., 60c; bu., \$1.75.

GOLDEN BEAUTY.—This is an improved strain of the well known Golden Dent Corn, having been carefully bred and selected by a well known Virginia corn grower for a number of years, the result being larger and more uniform ears, well filled from butt to tip, very vigorous and heavy growth, and a sure cropper. A great corn for late planting. Price per qt., 15c; pk., 60c; bu., \$2.00.

EARLY LEAMING.—A fine, early-maturing yellow corn, with small stalk, and bearing two to three well filled ears of deep grain to each stalk. Can be planted later than any other field corn. Per qt., 15c; pk., 60c; bu., \$1.75.

STRAWBERRY RED.—This is a splendid corn, bearing one and two large well filled ears of beautiful deep red kernels. Bears well on most of our highlands, and reaches maturity in ninety days. Contains more feed value than white corn, and is preferred by the stock. We have only a very limited quantity of this corn. Price per qt., 20c; pk., \$1.00.

COLLIER'S GOLDEN GEM.—One of the best yielding yellow corns in cultivation, resembling Leaming, but makes a larger growth of stalk, and generally bears two long, well filled ears of deep grained kernels. We recommend this corn as the best of all Yellow Varieties. Price per qt., 15c; pk., 75c; bus., \$2.25.

MAINE-GROWN SEED POTATOES

Selected Seed Stocks, grown especially for seed purposes, by the best and most careful seed potato grower in Aroostook County, Maine. Purity and quality considered before prices. Prices on Potatoes fluctuate, and are subject to market changes.

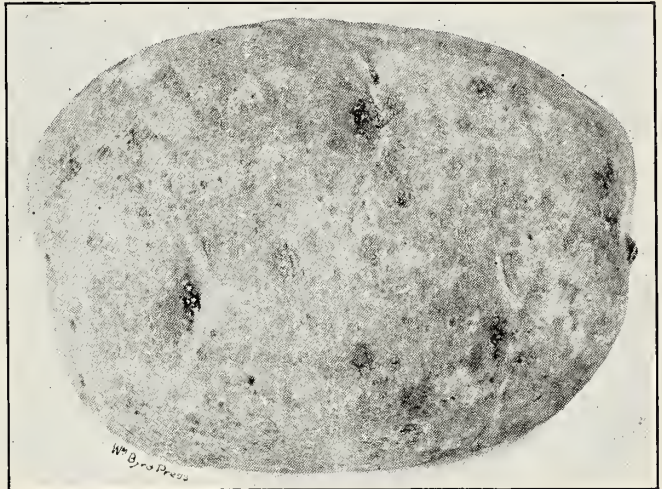
IRISH COBBLER.—The favorite above all others as an extra early market potato. The tubers are large, smooth and round, meat creamy white; very few eyes, and of fine quality; a good yielder and considered the most profitable potato for market gardeners. Price per bu., \$1.85; 11 pk. bag, \$4.75.

SECOND CROP IRISH COBBLER.—As the name implies, this is the second crop of same year of the Maine grown Irish Cobbler, and is planted extensively by market gardeners. Being smaller in size, the second crop will plant about one-third more ground than the first crop, and many truckers claim they get better results and more potatoes. Our stock of these potatoes is exceptionally fine, but very limited in quantity. Price per bu., \$1.85; per 11 pk. bbl. or bag, \$4.75.

RED BLISS, or TRIUMPH.—An extra early potato, round shape, pink skin, white meat, and good quality. One of the surest and most productive varieties, and highly recommended for home use, but does not sell as readily on our local markets on account of its pinkish appearance. Price per bu., \$2.00; per 11 pk. bag, \$5.00.

EXTRA EARLY SUNLIGHT.—A pure white, extra early variety of superior quality, oblong in shape, good yielder and a favorite wherever grown. Price per bu., \$1.75; per 11 pk. bag, \$4.25.

PRIDE OF SOUTH, or WHITE BLISS.—Similar to Red Bliss in every particular except the skin, which is white with pinkish eye. A heavy yielder, fine eating quality and a favorite for market. Price per bu., \$2.00; per 11 pk. bag, \$5.00.



Early Ohio.

EARLY OHIO.—Considered by many to be the finest quality potato in cultivation. Produces large size tubers, with very few small ones on vines; skin has a slightly pink tinge, smooth surface, oblong in shape, and of fine appearance. A good yielder and a good keeper. Medium early. Price per bu., \$2.00; per 11 pk. bag, \$5.00.

HOULTON EARLY ROSE.—The genuine Early Rose, and not to be compared with Western stocks, as it is much earlier, more prolific, and a better potato in every respect. Price per bu., \$1.75; per 11 pk. bag, \$4.75.

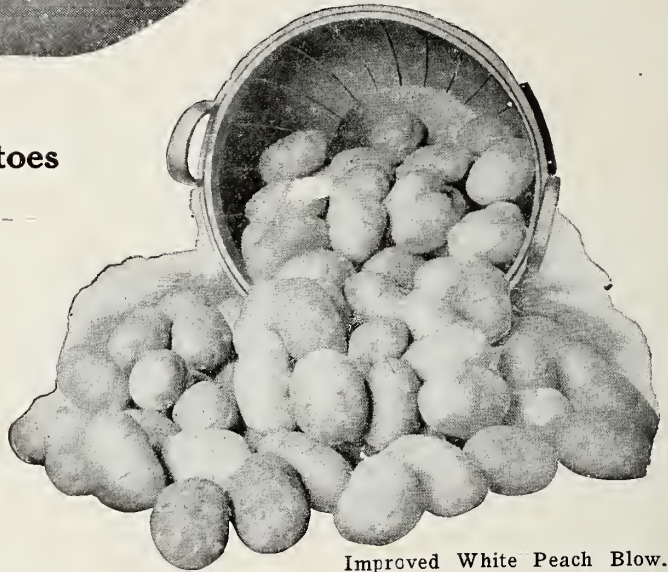
GREEN MOUNTAIN.—The favorite potato throughout the South for late planting. Large, pure white, oval shaped tubers of fine eating quality; a good yielder and keeper. Price per bu., \$2.00; per 11 pk. bag, \$5.00.



Irish Cobbler.

Cold Storage Potatoes

In order to have seed potatoes in sound, firm and vigorous condition for late planting from June to August, we carry a stock of the most desirable varieties in cold storage, and we shall be glad to quote our customers at any time on the variety and quantity desired, same to be kept in cold storage until such time as the customer may order them to be shipped out.



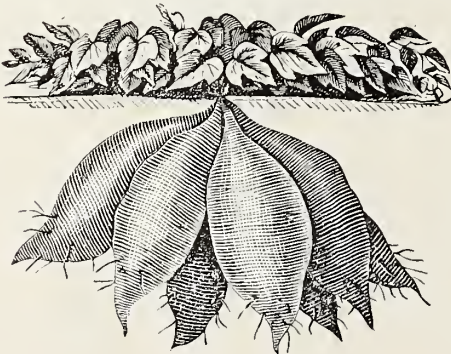
Improved White Peach Blow.

Seed Sweet Potatoes

NANCY HALL.—A pumpkin yam of finest quality; early maturing and good yielder.

WHITE YAM.—The standard variety for general crop purposes.

YELLOW BARK.—A dry mealy potato of fine table quality, and much desired by those who do not like a soft sweet potato.



EARLY REDS.—An extra early variety, generally planted to catch the earliest market. Quality not considered as good as the other varieties.

Prices on Sweet Potatoes fluctuate. Write for quotations in season.

Owing to the impossibility of procuring Potash at a reasonable price, we are unable to supply our customers with our Gro-So Potato Guano for this season. We can, however, recommend our "Pulverized Sheep Manure" for the growing of potatoes, and this we offer at \$1.75 per 100 lb. bag, or \$30.00 per ton. "Pulverized Sheep Manure" is also a quick acting and effective guano for all Vegetable Crops, and our truckers will do well to use the same freely on all crops.

VEGETABLE SEEDS

High-Grade

True to Name

A specially selected list of varieties proven through practical tests to give best results for Virginia and the South



Asparagus

Asparagus succeeds best in a light, warm, rich soil, with an Eastern or Southern exposure. To grow from seed, sow in drills two feet apart, covering seed one to two inches deep, and thin out when up and growing. Keep the plants free from weeds by thorough cultivation during the Summer. These plants should then be transplanted when one or two days old to the place selected for your asparagus bed, and can be put out either in Fall or Spring. One or two-year-old plants can be purchased to avoid delay of raising same.

CULTURE.—Plow trenches 10 to 12 inches deep, five feet apart; scatter well rotted manure in bottom of furrow and mix with soil, cover this with a layer of soil two inches deep and give an application of pure raw bone; on this set your plants 15 inches apart in the row, spreading the roots carefully. Then cover with soil three to four inches deep. When Winter comes cover the beds with stable manure, which fork in when Spring opens and earth up the beds to a further depth of about 18 inches. After the cutting season, allow the plants to grow, and during the following Winter the beds should be turned down with a plow and more manure and raw bone applied, then earthed up again to original height. This should be repeated each year during the life of the beds.

PALMETTO.—Favorite and earliest variety for Virginia. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

CONOVER'S COLOSSAL.—A standard variety, large and tender stalks. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

ASPARAGUS ROOTS.—Two years old. 75c per 100; \$4 per 1,000.

Artichoke

JERUSALEM.—Grown from roots or tubers for stock and hog food. Plant and cultivate like potatoes; special prices on large lots. Qt., 20c; pk., 50c; bu., \$1.25.

Beans or Snaps

Snaps can be planted from about April 1st to the middle of August, and should be put in at intervals of about two weeks if a succession of fresh snaps is desired.

CULTURE.—Plant in rows 2 to 3 feet apart, with the beans about 3 inches apart in rows, covering to a depth of 2 inches; 1 quart will plant 100-foot drill.

Crop very short. Would advise ordering early before stocks are exhausted.

IMPROVED RED VALENTINE.—This is the best known and decidedly the most popular bean grown by market gardeners and for family use. Pods are round, thick, and fleshy, good quality and ready to be picked seven weeks after planting. Pt., 20c; qt., 30c; pk., \$2.00; bu., \$7.50.

FULL MEASURE.—A new prolific stringless green podded variety of excellent quality. Pods are long, round and tender. Very prolific. Crop Failed.



Full Measure.

BOUNTIFUL BEANS.—New, green podded Bush Bean, heavy cropper, very early, fine shape, stringless, good quality, hardy and productive. One of the very best Bush Beans. Pt., 20c; qt., 40c; pk., \$2.00.

GIANT STRINGLESS GREEN POD.—An exceptionally fine bean for home or market. Perfectly stringless. Longer pod than Burpee's Stringless. Good, strong, vigorous grower, and a continuous bearer for weeks. Pt., 20c; qt., 40c; pk., \$2.00.

BURPEE'S STRINGLESS GREEN POD.—An absolutely stringless bean of unequalled quality, extra early in maturity, and one of the best sort for market gardeners and home use. Should be in every garden. Pt., 20c; qt., 40c; pk., \$2.50.

BLACK VALENTINE.—This is the hardest of the green podded beans; being able to withstand more frost than any other sort of this kind, it can be planted earlier. The pods are long, straight, very handsome and produced in profusion. Especially recommended for market gardeners. Pt., 20c; qt., 35c; pk., \$2.00; bu., \$7.50.

EARLY YELLOW SIX WEEKS.—An extra early green podded variety. Very hardy. Long, straight, flat pods of fine quality. Pt., 15c; qt., 25c; pk., \$1.75; bu., \$7.00.

Dwarf Lima Beans

Plant in May after the ground has become warm. For the pole varieties use 10-foot poles in center of hills, which should be about 6 feet apart. Bush varieties should be planted in rows 3 feet apart, with the beans about 12 inches apart in rows, cover about 2 inches deep. A second planting of the bush varieties should be made in June or early part of July to get a seed supply and dry beans for Winter use, as the early plantings are likely to become wormy and unfit for seed. This is also the case with snaps, black-eye peas and beans. One quart of the large plants 100 hills; one quart of the small varieties plants 200 hills.

BURPEE'S LIMA.—This is the largest of the bush varieties. Plants of upright growth, holding the beans well off the ground. Tender and of good flavor. Pt., 20c; qt., 35c; pk., \$2.00.

HENDERSON'S BUSH LIMA.—The original well known small bush lima or butter bean. Earliest of all in maturing, a heavy yielder and good flavor. A prolific crop for market gardeners, and a very desirable bean for home garden. Pt., 15c; qt., 25c; pk., \$1.50; bu., \$5.50.

HANOVER IMPROVED BUSH LIMA.—Somewhat larger than the Henderson's Bush Lima, but not as large as Burpee's. Very prolific and good quality. Vines very vigorous in growth and rather inclined to make runners. Pt., 15c; qt., 25c; pk., \$1.50; bu., \$5.50.

FORDHOOK BUSH LIMA.—Vines strong, erect and true Bush Lima growth. Foliage heavy and very dark green in color. The stalks that produce the blossoms are thrown out from the lateral and main stalks. The pods resemble Dreer's Bush Lima, but average more than double the size and contain from 3 to 5 beans to the pod. Pt., 20c; qt., 40c; pk., \$2.25.

Wax-Podded Varieties

PROLIFIC BLACK WAX.—One of the most popular varieties for home or market. Pods round, brittle and fine flavor. Pt., 20c; qt., 40c; pk., \$2.50.

IMPROVED DWARF GOLDEN WAX.—One of the standard wax varieties, early in maturing. Pods long, fleshy, brittle, and golden yellow in color. Pt., 20c; qt., 40c; pk., \$2.50.

WEBER WAX.—Long fleshy pods, transparent yellow color. A good bearer, fine flavor and an excellent variety for home use or market. Pt., 20c; qt., 40c; pk., \$2.25.

Pole or Cornfield Snap Beans

Plant in May in hills five feet apart, using an 8 to 10-foot pole in each hill. Can also be planted in the cornfield when the corn is laid by. One pint plants 100 hills.

OLD HOME-STEAD, or THE KENTUCKY WONDER.—The earliest pole bean. Enormously productive. Long, crisp, tender pods, produced in clusters. Considered the most popular pole bean grown. Pt., 20c; qt., 35c; pk., \$2.00.

LAZY WIFE.—Pods broad, thick, very fleshy and entirely stringless. Very prolific, the pods retaining their rich, tender qualities for a long time. Being late to mature, this is a valuable bean for the fall season. The dry beans are also used as shell beans in the winter. Pt., 20c; qt., 40c; pk., \$2.25.

RED SPECKLED CUT SHORT.—A very popular pole bean extensively used for planting among corn. A sure crop and a good bean. Pt. 20c; qt., 35c; pk., \$2.00.



Old Homestead Beans

Pole Lima Beans

SMALL LIMA, or POLE BUTTER BEAN.—The standard variety. Earlier and more productive than the larger limas. Sure crop, fine quality; and a general favorite throughout the South. Pt., 15c; qt., 25c; pk., \$1.50; bu., \$5.50.

IMPROVED POLE LIMA.—A much larger bean than the small lima, and somewhat earlier and more prolific than the standard large white lima. A good bean for general crop purposes. Pt., 15c; qt., 30c; pk., \$1.75; bu., \$6.00.

KING OF GARDEN.—Very large beans. Pods well filled, fine flavored; medium early in maturing, and a great favorite with market and home gardeners. Pt., 15c; qt., 30c; pk., \$1.75; bu., \$6.00.



Beets

For very early crops, sow in hot beds and transplant just as soon as the weather begins to warm up. For outdoor crops, sow in March and April in drills 2 to 2½ feet apart, covering the seed about 1 inch, and thin out if plants are too thick in rows. Mangels or stock beets should be sown in May. Select a light, loose and deep soil for beets—one ounce sows 50-foot drills. Six to eight pounds per acre.

CROSBY'S EGYPTIAN.—An extra early variety of good quality. Attractive shape, small tops. Popular with truckers for extra early market. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 60c.

CRIMSON GLOBE.—Early red crimson; perfect globe, smooth and clean. Fine quality for market and table. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 60c.

EXTRA EARLY ECLIPSE.—This is the most popular market beet. Globe shape, dark red, tender. Very early and highly recommended. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 60c.

DETROIT DARK RED.—A fine turnip beet of dark red color, early maturity. Very attractive. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 60c.

IMPROVED EARLY BLOOD TURNIP.—Dark red, uniform, smooth growing. A good variety for home use and for main crop. Very best quality, medium early. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 60c.

SWISS CHARD.—This vegetable belongs to the beet family, but is grown for its leaves and stems. The leaves are used as spinach, and the stems as asparagus. Combining the two vegetables, Swiss Chard is a valuable addition to any garden. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 50c.

Mangel or Stock Beet

The great value of the Mangel or Stock Beet is not generally known or appreciated in the South. They are easily grown and are unequalled as a milk producing food for Winter feeding. Everyone owning a cow should plant at least a small acreage in Mangels. Cultivate like beets, but thin out to about eight to ten inches apart. Six to eight pounds will sow an acre.

MAMMOTH LONG RED.—Grows to an enormous size. Very easily cultivated, and the most generally used stock beet in the South. Oz., 5c; ¼ lb., 10c; 1 lb., 30c; 5 lbs. at 25c. lb.

GOLDEN TANKARD.—The best known and largely grown mangel. Especially recommended for dairymen on account of its milk producing properties. Well adapted to our light soils and should be grown by every one owning a cow. Oz., 5c; ¼ lb., 10c; 1 lb., 35c; 5 lbs. at 30c lb.

Try a bag of our "Pulverized Sheep Manure" on your early vegetables and see them grow. Per 100 lb. bag, \$1.75.



Extra Early Eclipse.

Send me some of your catalogues to hand my friends; we all like your Seed House.

C. W. EDWARDS,

Ophelia, Va.



W. G. and Son's Short Stem, Early Flat Dutch.

Cabbage

CULTURE.—For the earliest setting out in the Spring, it is best to set out in February or March, plants which have been wintered over either in cold frames or out of doors. For a succession, sow the early varieties in hot-bed or cold-frames in January, or early March. Later sow the early varieties out of doors in March or April. For winter cabbage sow in April, May or June, transplanting in July or August, to head up during the late fall and winter. Fall sowings, to make plants for setting out in the fall or early Spring, should be made after September 20th; if sown earlier they will likely shoot to seed, especially the flathead kinds. Early varieties should be set 18 inches apart in rows $2\frac{1}{2}$ to 3 feet apart; late varieties, being larger, should be set 2 feet apart in rows 3 feet apart. One ounce will produce about 2,000 plants; six ounces will make enough to set an acre. Cabbage requires good rich soil, or plenty of manure and fertilizer, and to be worked frequently and deeply.

GROSSMANN'S TRUE EARLY JERSEY WAKEFIELD.—Our strain of this cabbage is unsurpassed. It has been carefully bred for years by the most careful cabbage seed grower on Long Island, strictly true to type, makes a uniform, solid head, and resists cold and unfavorable conditions. Undoubtedly the best of all extra early varieties. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.



Early Summer.

EARLY YORK.—A favorite, extra early variety. Pointed head. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

HENDERSON'S EARLY SUMMER.—A splendid second early flat headed variety, following the Wakefields and Early Flat Dutch. Makes large, fine, round heads, very solid. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.50.

GROSSMANN'S IMPROVED CHARLESTON WAKEFIELD.—Since the introduction of the large type Wakefield cabbage, our grower has been continuously improving our strain of this variety until he has now reached a point of perfection, which we feel can hardly be surpassed. Although a very few days later in maturing, it is double in size, and makes a much better, and more solid head than the original early Wakefield, and its heading qualities are unequalled by any other early cabbage, almost every plant making a good, firm head. We unhesitatingly recommend Grossmann's Improved Charleston Wakefield to our truckers and gardeners as being the best early cabbage in cultivation, combining earliness, size, uniformity in heading, and solidity of head. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.75.

EUREKA EXTRA EARLY.—Is a very fine flat headed cabbage; as early as the Wakefield, heads of good size, and very uniform in growth and heading qualities. Very popular with our truckers. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

GROSSMANN'S SHORT STEM EARLY FLAT DUTCH.—The best early flat headed variety, maturing a few days later than Charleston Wakefield, making large flat solid heads, a sure header, and highly recommended to our truckers. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

EARLY DRUMHEAD.—An old standard variety, very popular in the South. Medium early, large, solid heads, good quality. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.50.



Danish Ball Head.

ALL SEASONS.—One of the best all-around cabbage grown, very large heads, and very solid; a good variety for late crop, being a splendid keeper. Plants are very vigorous and sure heading, and withstand hot and dry weather. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.50.

HENDERSON'S SUCCESSION.—A good cabbage for summer or late crop, larger and somewhat later than Henderson's Early Summer, making very solid heads of handsome appearance, keeps well for winter use. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.50.

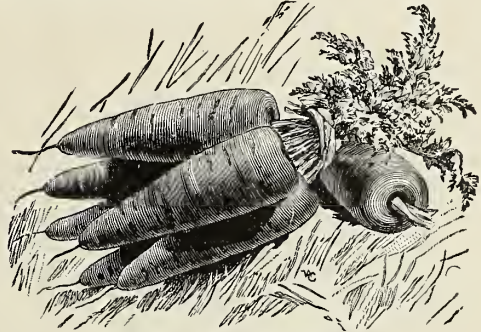
LARGE LATE DRUMHEAD.—A favorite winter cabbage recommended for its deep, heavy, solid and long keeping heads, has few outside leaves and is a splendid shipping cabbage. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.50.

DANISH BALL HEAD.—Considered the heaviest cabbage for its size in existence, very solid and a sure header and good keeper. A splendid fall cabbage. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; 1 lb., \$2.00.

GROSSMANN'S PREMIUM LATE FLAT DUTCH.—This fine cabbage is without doubt the best strain for general crop or for fall cabbage; it grows to a very large size, makes hard compact heads, with few outside loose leaves, withstands hot and dry weather well, and its keeping qualities are unequalled. We can safely say every plant makes a hard head of cabbage, as in three separate tests of fifty plants each, "Our Premium" produced 47, 49 and 50 perfect heads, respectively. We recommend the same to our market gardeners and truckers as the very best winter cabbage. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.75.

Carrots

Select a light, rich deep soil, sow in drills 15 inches apart, cover seed one-half inch and thin out to 3 inches in rows. Sow in early Spring from March to May. For Winter use put the roots in cellar or in a kiln out in the field. Carrots make a fine food for stock and should be planted extensively. One ounce sows 100-foot drill, 3 to 4 lbs. per acre.



Improved Long Orange.

IMPROVED LONG ORANGE.—The standard variety for main crop. Makes long, smooth, tapering roots, of beautiful orange color, growing to good size. Fine winter variety for table, market and stock, has good keeping qualities. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

EARLY SCARLET SHORT HORN.—The earliest variety grown, blunt pointed, about three inches long and sweet flavored, trucker's favorite for early market. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

HALF LONG DANVERS.—Roots of medium length, smooth and handsome in appearance, deep orange color, crisp and tender. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

CHANTENAY.—One of the best carrots for all purposes. Roots about 6 inches long, blunt pointed, smooth, fine grained and sweet; a heavy yielder. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

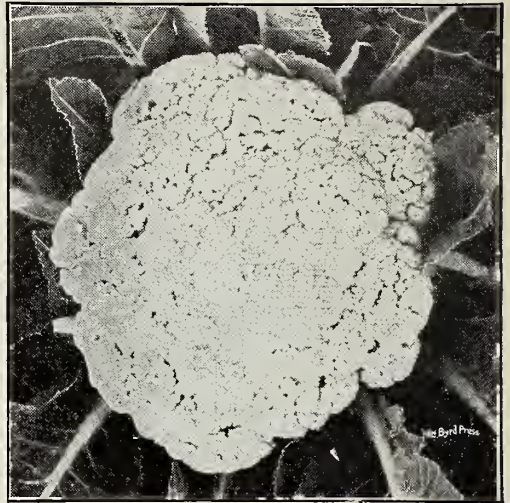


Grossmann's True Early Jersey Wakefield.

Celery

CULTURE.—Sow in February, March or beginning of April, in drills 8 to 10 inches apart, in a bed of fine, rich soil, covering one-fourth of an inch. If the soil is dry, press the earth with the back of spade or roller after covering, and keep clear of weeds, or the young plants will be smothered. Transplant from July to October. August and September settings succeed excellently, and requires less labor if set out earlier. To prepare a bed, select a rich moist soil, throw out the earth to a depth of 6 inches, 4 or 5 inches wide, and put in 3 or 4 inches of well-rotted manure, dig in well, and cover with fine soil. Set the plants 6 to 8 inches apart, press the soil firmly, and earth up when the plants are large enough. Earth up two or three times, but do not let the earth get into the heart of the plant. When severe weather comes on, cover gradually with leaves, hay or straw, and place boards on top; waterproof felt paper is also used. In such a bed the stalks will blanch perfectly, and may be taken out when wanted. In field culture, the plants are set out on the surface, in rows 4 feet apart, and 6 inches in the row. Celery requires frequent cultivation, and the earth drawn up to the plants as rapidly as it grows. Celeriac, or Turnip-Rooted Celery, needs no earthing up, and may be planted in rows 18 inches apart. Celery seed germinates slowly; cover lightly and keep constantly moist.

WHITE PLUME.—A splendid self-blanching variety for early use. Being self-blanching, this variety requires little work, as it naturally blanches when reaching maturity. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.50.



Early Snowball.

GIANT PASCAL.—This variety is more generally grown in the South than any other variety, and is considered one of the best for fall and winter. It makes large, very solid stalks, and is very crisp and tender; a good keeping celery. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

WINTER QUEEN.—A very desirable variety for winter, strong growth, making heavy and solid stalks, blanches creamy white, crisp and tender; splendid keeper. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.50.

GOLDEN SELF-BLANCHING.—This variety excels all others in tenderness and fine flavor; makes solid stalks, 15 to 20 inches high, is self-blanching and good keeping quality; very handsome in appearance. Pkt., 15c; oz., \$1.00.

Cauliflower

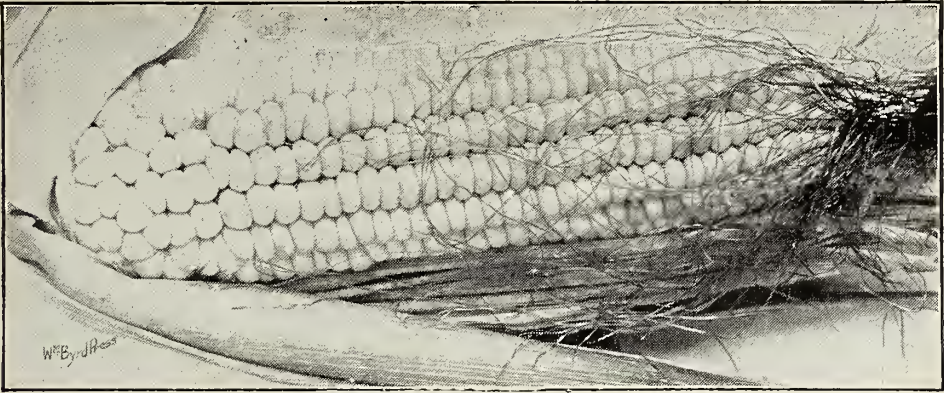
Cultivate like cabbage. Sow in January or February for early crop, or May for late. Transplant to moist soil, manure heavily and water freely. When heading begins, fasten leaves over top of head to whiten.

EARLY SNOWBALL.—The earliest and considered the best for the South, a sure header, making large, solid, perfectly white heads of good quality. Pkt., 25c; oz., \$1.50.

AUTUMN GIANT.—Large late variety, heads large, white, and is a good keeper. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.00.



Golden Self-Blanching Celery.



Trucker's Favorite Corn.

Garden Corns

Plant early corn in rich and well-manured ground from March to middle of April. Sugar corn in May, if ground is warm. Cultivate frequently. Plant a piece about every two or three weeks to get a succession of roasting ears. The early varieties can be planted as late as July for late roasting ears. One quart plants 200 hills; eight quarts per acre.

ADAMS EXTRA EARLY.—The earliest sweet corn in cultivation, makes a small ear and stalk, can be planted close together, and is used by our market gardeners to catch the early market. 3 ears, 10c; 20c per half doz.; 35c per doz.

ADAMS EARLY.—Similar to Adams Extra Early, but a little later and very much larger ears, earlier and harder than sugar corn; a profitable corn for truckers. 3 ears, 10c; 20c per half doz.; 35c per doz.

Shelled—Pt., 10c; qt., 15c; pk., 80c.

ADAMS IMPROVED EARLY.—An improved strain of the Early Adams, with larger and more uniform ears and deeper grains; perhaps a few days later in maturing than Early Adams. 3 ears, 20c; 20c per half doz.; 35c per doz.

TRUCKER'S FAVORITE.—As name implies, this is the favorite with all market gardeners and truckers, following close to Early Adams in maturity; it is larger in ears, deeper in grain, and a sure crop; a sweet and palatable corn. Truckers Favorite is considered the best early market corn grown. Shelled—Pt., 10c; qt., 15c; pk., 75c; 30c per doz. ears.

SOUTHERN SNOWFLAKE.—A beautiful, large eared corn with deep, soft, pure white grains, almost as early as Trucker's Favorite, but grains and ears larger; a very desirable market corn for main crop. Per ear, 5c; dozen ears, 50c.

Sweet or Sugar Corn

GOLDEN BANTAM.—An extra early sweet corn of very sweet and tender qualities; can be planted earlier than other sweet corns; small ear of golden yellow color; bears two and three ears to the stalk. Pkt., 5c; pt., 10c; qt., 20c.

EARLY WHITE EVERGREEN.—An early variety of Stowell's Evergreen type, pure white kernel, deep grains and delicious in flavor; a very desirable corn for market gardeners, canners and home gardeners. Pkt., 5c; pt., 10c; qt., 20c; pk., \$1.00.

STOWELL'S EVERGREEN.—This is the universal sugar corn. Makes large, well filled ears, bears abundantly on good soil; and the ears remain in the green state for a long time; deep grained and very sweet. Pkt., 5c; pt., 10c; qt., 15c; pk., 75c.

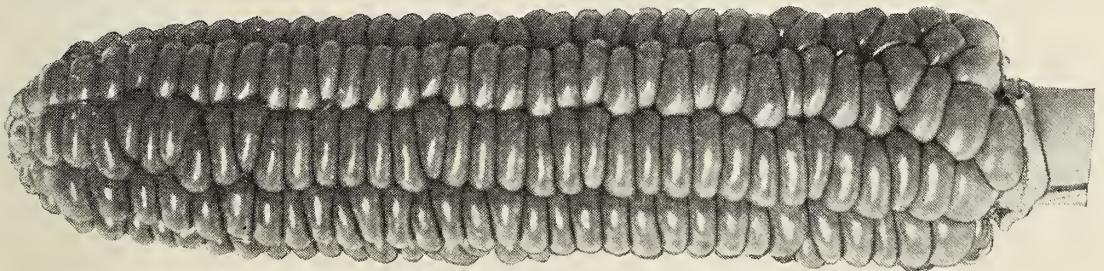
COUNTRY GENTLEMAN.—One of the richest and most popular late sweet corns, has a good sized ear with small cob, long slender grains, and is especially recommended for home gardeners. Pkt., 5c; pt., 10c; qt., 20c; pk., \$1.00.

Pop Corn

RICE.—The most popular of all popcorns, a good yielder. Corn pops pure white and of good quality. Per 2 ears, 5c; 25c per dozen ears.

MAPLEDALE PROLIFIC.—A prolific, large eared variety, grains pure white and extremely tender. Per 2 ears, 5c; 25c per doz. ears.

QUEEN'S GOLDEN.—A very handsome yellow pop-corn, large grains; pops perfectly white, and of good flavor. Generally yields four ears to the stalk. Per 2 ears, 5c; 25c per doz. ears.



Golden Bantam Sugar Corn.

Cucumbers

CULTURE.—For very early crop, plant in hotbed, in pots or small paper boxes, or on pieces of sod, grass side down, so that they can be readily transplanted; or plant in the open ground as soon as the weather becomes settled warm, about the end of April or during May, in hills about 4 feet apart each way. The hills should be previously prepared by mixing well-rotted manure with the soil. Put about ten seeds in each hill, and when all danger of insects is past, thin out to four plants. The fruit should be gathered when large enough, whether wanted or not, for if left to ripen on the vine, it destroys its productiveness. For pickling, plant in June or July. One ounce will plant 50 hills; two pounds, one acre.

EARLY FORTUNE.—An extra early variety of uniform shape, dark green color; fast becoming a favorite with market truckers. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

GREEN PROLIFIC.—A heavy bearing variety making fruit of medium length, and especially recommended for pickle; used extensively for late planting for pickling purposes. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

KLONDYKE.—This variety is becoming very popular as a money maker with our truckers; fruit is long and straight, hard and very dark green color, making it a good shipping variety; early in maturing and very productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

ARLINGTON WHITE SPINE.

—An improved strain of the old reliable white spine variety; the fruit is of good uniform shape, straight in growth, and rich dark green color; very popular variety with our truckers. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

IMPROVED LONG GREEN.

—This is the best cucumber for all purposes; fruit grows ten to twelve inches long; straight and dark green in color; firm and crisp; a heavy bearer and good quality; the young fruit being very desirable for pickle. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

GHERKIN, or BURR CUCUMBER.—Small, round and prickly; used only for pickling. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c.

DAVIS PERFECT.—This is an early variety and makes long symmetrical fruit of deep green color, which it retains for a long time; considered one of the best table varieties, and is much thought of by our truckers; highly recommended. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

I have been buying my seeds of you for thirty years and I expect to continue to do so until I die.

W. W. SAMUELS,
Chesterfield, Co., Va.

Collards

A fine winter vegetable, similar to cabbage, but does not make solid heads. Sow and cultivate like late cabbage.

NORTH CAROLINA SHORT STEM.—A short stem variety with large spreading leaves; very hardy and good flavored. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

TRUE GEORGIA.—The old standard and most popular collard grown throughout the South, tall and long stemmed, good flavored and very hardy. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

Corn Salad, or Fetticus

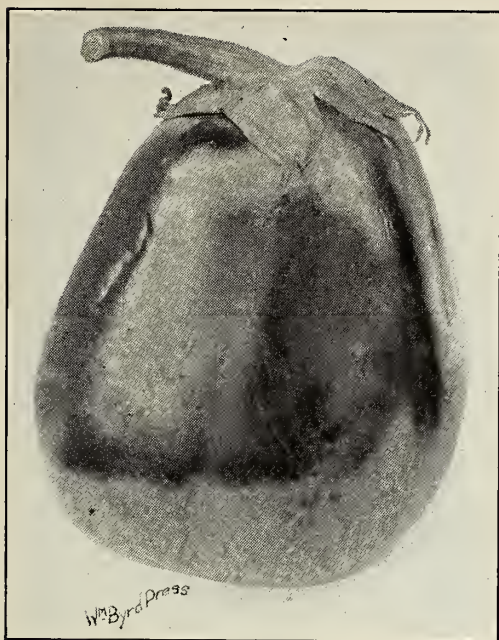
A very desirable salad; can be used like lettuce or cooked like spinach; to be sown in August and September for fall or spring use. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

Cress

WATER CRESS.—To be sown in the spring along edges of creek or pond. Only one sowing is necessary, as it increases and perpetuates itself; make a splendid salad and is considered quite a delicacy by a great many. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.



Arlington White Spine.



Black Beauty.

Egg Plant

CULTURE.—Egg Plants do best in a deep rich loamy soil. In February or March sow in hotbeds, and when two inches high, transplant to good rich soil. After frost is past, set out three feet apart each way, and protect from bugs by dusting lightly with slugshot. One ounce will produce about 1,000 plants.

BLACK BEAUTY.—Two weeks earlier than any other variety; produces large, lustrous, purplish fruit of fine quality; a very desirable market and shipping variety. Pkt., 5c; $\frac{1}{2}$ oz., 15c; oz., 25c; $\frac{1}{4}$ lb., 75c.

NEW YORK IMPROVED PURPLE.—The best known and popular variety, vigorous and productive, fruit large sized; smooth, glossy, deep purplish skin. Pkt., 5c; $\frac{1}{2}$ oz., 10c; oz., 20; $\frac{1}{4}$ lb., 50c.

Endive

CULTURE.—Sow in August in drills 18 inches apart, and thin out to blanch the heart. In dry seasons give plenty of water.

A most excellent salad or garnishing for the late summer and fall. Use same as lettuce.

GREEN CURLED.—Best variety; green, crisp and tender. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Gourds

DIPPER.—This gourd is used for making dippers. Pkt., 5c; oz., 20c.

NEST EGG.—This gourd makes a good nest egg which lasts for years. Pkt., 5c; oz., 20c.

DISH CLOTH.—The lining of this gourd is used for making dish cloths and bath sponges. Pkt., 5c; oz., 20c.

HORSE RADISH ROOTS.—20c per dozen; 50 for 50c; 75c per 100.

Kale

CULTURE.—The Siberian and Scotch are the popular sorts for fall sowing; a limited quantity is also sown in the spring. Sow from August 15th to October 15th, either broadcast or in drills 18 inches apart and give some cultivation, and they will yield greens throughout the winter. Spring or Smooth Kale may be sown either in the fall or spring, making greens earlier than the winter sorts, but not of as fine quality. Spring sowings should be made in February and March. Sow 8 pounds per acre broadcast, 4 to 5 pounds in drills.

EARLY CURLED SIBERIAN.—A hardy, vigorous, spreading green kale, with leaves beautifully curled around edges. Will stand the winter without protection, and is the most generally used kale for truckers and home gardeners. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 35c.

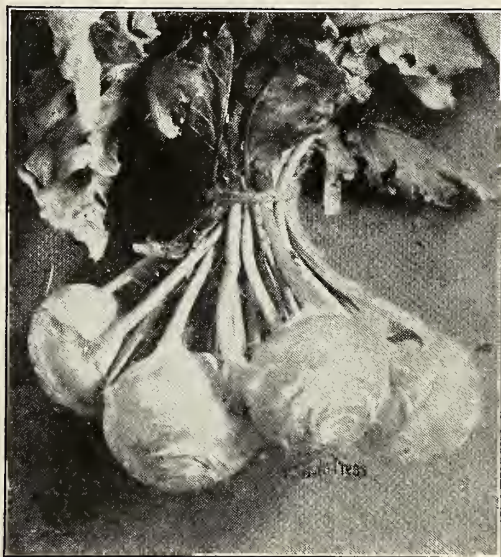
GREEN CURLED SCOTCH, or NORFOLK.—This is a dwarf spreading kale, very largely grown around Norfolk for shipping purposes. Leaves of deep green, beautifully curled and crimped. Hardy and can be grown without protection for winter. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 50c.

SPRING KALE.—A quick growing smooth leaved variety. Very generally sown. Can be sown in fall or spring, being hardy enough to withstand the winter. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 20c.

Kohl Rabi

Combines the flavor of cabbage and turnips and makes a splendid dish if used when the bulbs are 2 to 3 inches thick. Sow early in hotbed and transplant and sow outside in April in rows 18 inches apart, thinning to 8 inches; for Winter use, sow in June or July. Also makes fine stock food, yielding 300 to 400 bushels to the acre.

EARLY WHITE VIENNA.—The best variety for Virginia and the South; small top, flesh white, very tender; early to mature. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c.



Kohl Rabi.

Lettuce

Sow the seed at intervals of three weeks during the spring for a succession of lettuce, and transplant 9 inches apart in beds or rows. Sow in July and August for fall crop, in September for winter and spring crops. For winter heading transplant September plants in cold-frames. One ounce produces 1,500 plants.

EARLY WHITE CABBAGE.—This is the best all-around lettuce in cultivation. Does well for early spring, summer and fall planting. Makes fine, large, solid heads with blanching hearts. Crisp and tender. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

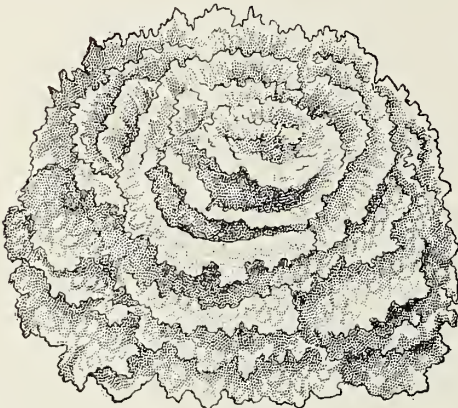
IMPROVED BIG BOSTON.—This is a great favorite for forcing, and also does exceptionally well for outdoor planting for all seasons. Heads large, of fine appearance; crisp and tender, and of fine flavor. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

IMPROVED HANSON.—One of the best summer lettuce. Has large, solid, compact heads, tender and crisp; blanches well and withstands hot weather. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

EARLY CURLED SIMPSON.—Makes a well blanching, curly loose head; crisp and tender. Rapid growing. One of the best curled varieties. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.



Early White Cabbage Lettuce.



Early Curled Simpson.

WHITE PARIS COS. The best of the celery lettuces; forms large, light green, well folded heads of upright growth, and popular for its crispness and mild flavor. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

"PULVERIZED SHEEP MANURE"

A natural plant food, containing a liberal percentage of potash. Acts quickly, and does not burn.

Try it on your potatoes and all Vegetable Crops; results will please you.

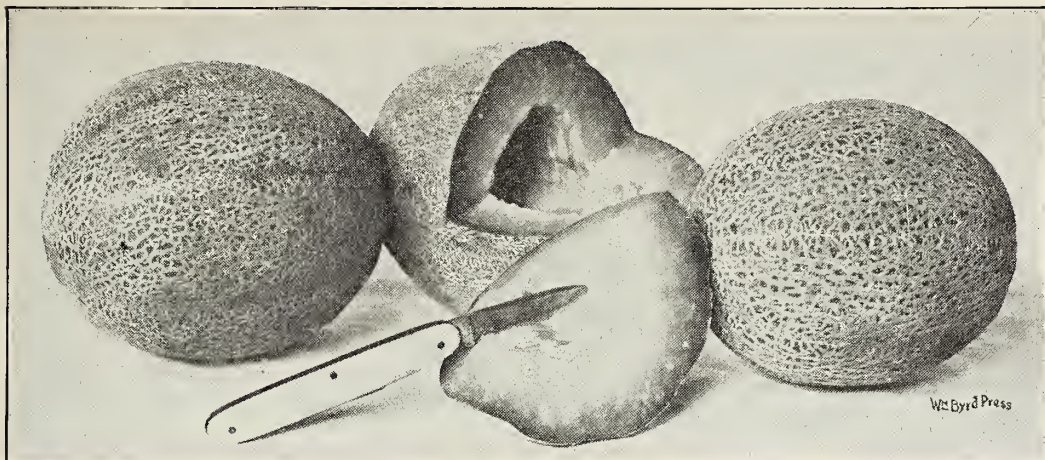
Per 100 lb. bag	\$1.75
Per ton	\$30.00

Leek

CULTURE.—Leek is generally considered superior to onions for soup-flavoring, etc. Sow as early as practicable in the Spring in a light, rich, moist soil in drills half an inch deep. When six or eight inches high, trim off the tops and roots, and transplant to rows one foot apart and six inches apart in the row, setting them three or four inches deep and earthing up as they grow, so that the necks will become well blanched. May also be sown in cold-frames in September, and the young plants transplanted in the fall or early spring to where they are to remain. One ounce will sow about 100 feet of drill.



LARGE AMERICAN FLAG.—This is the standard variety generally used. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c.



Knight Melon.

Cantaloupe, or Musk Melon

CULTURE.—Prepare hills 4 to 6 feet apart in a rich, moderately dry sandy soil, using well-rotted manure. When danger of frost is gone, plant 10 to 12 seeds one inch deep in each hill. To promote fruitfulness, pinch the vines when blossoming begins, and cultivate till the vines cover the ground. To combat insect attacks, dust with ashes, lime or road-dust. Do not grow near cucumbers, squashes, etc. One ounce will plant 50 hills; two pounds, one acre.

KNIGHT.—This is a splendid shipping melon. Somewhat earlier than Rocky Ford; medium sized, uniform in shape. Well netted, thick green flesh, and good quality. Oz., 10c; $\frac{1}{4}$ lb., 30c; 1 lb., \$1.00.

IMPROVED NETTED GEM.—An improvement on the old favorite. Fruit uniform and larger than the Rocky Ford and quality unsurpassed. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

EARLY HACKENSACK.—A large medium early melon, roughly netted, rather deeply ribbed. Splendid shipping and market melon. Fine quality. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

ANNE ARUNDEL.—An old standard variety, great favorite for shipping; medium to large sized, well netted and fine quality. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.



Early Hackensack.

TRUE ROCKY FORD.—This is the most popular of all cantaloupes; small, nearly round, very thickly netted; small seed cavity, and delicious in flavor. A money maker for truckers, and should be in every garden. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

EXTRA EARLY HANOVER.—This is the earliest cantaloupe in cultivation, being fully ten days ahead of the Rocky Ford; makes a medium sized melon, round, slightly flattened at ends, and well netted. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

BURRELL'S GEM.—Similar in appearance to the Netted Gem, but Pinkish flesh instead of green; well netted thin rind, very solid; exceptionally sweet flavored. A splendid variety for table use. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

LARGE HACKENSACK.—An extra large green fleshed variety, deep ribs, and heavily netted. Flesh thick, juicy and sweet; a splendid table melon. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

BALTIMORE OR ACME.—Medium sized variety, oval shaped, well ribbed, heavily netted, green flesh of fine quality. Very attractive in appearance and a splendid all around melon. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

Banana.—Grows 18 to 24 inches long. Thick flesh and of a most delicious flavor; very sweet. Oz., 10c; $\frac{1}{4}$ lb., 25c.

BURRELL'S GOLD LINED NETTED ROCK.—One of the finest strains of the Rocky Ford variety. Melons of fine green, thick flesh and very sweet. The seed cavity very small, the flavor is exquisite. A heavy yielder. One of the sweetest melons in cultivation. Oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

BURRELL'S SELECTED ROCKY FORD.—Grown especially for us by originator. Seed saved from selected melons only. The very finest strain of Rocky Ford obtainable. Oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

CHICAGO MARKET.—This we consider the best nutmeg melon, combining earliness of maturity, large and uniform size, thickly netted skin, small seed cavity, and deep green flesh. Melons grow four to five pounds in weight. Fine quality. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

MONTREAL MARKET.—The largest of all nutmeg sorts. Fruit round, flattened at end with very broad ribs. Flesh green and of fine quality. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.



Tom Watson.

Watermelon

Cultivate like cantaloupes, but make the hills 12 feet apart. Do not plant near gourds or pumpkins. One ounce for 30 hills, 3 lbs. for acre.

HARRIS' EARLIEST.—The earliest variety grown, and a good melon for being so early. Medium large fruit, handsome in appearance, and first class quality. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

DUKE JONES.—A large round, dark green melon. Splendid shipper; flesh dark red; sweet and juicy. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

KOLB GEM.—Particularly fine shipping melon. The rind is exceptionally hard and firm. Bright red flesh and solid; heavy yielder. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

IMPROVED GEORGIA RATTLESNAKE.—This is an improved strain of the old standard Rattlesnake melon, and has all the fine qualities of same, combined with larger growth and unsurpassed flavor. A splendid melon for shipping or home use. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

TOM WATSON.—Decidedly the most popular melon grown. Large, long and dark green; fruit of exceptionally fine shipping quality. Rich red flesh solid, sweet and luscious. Good shipping, a good market, and a fine table melon. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

KLECKLEY'S SWEET.—One of the most popular melons grown; dark green skin, thin rind, solid scarlet heart. Sweet crisp and melting flavor. One of the best melons grown. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

JACKSON.—An exceptionally sweet melon, and one of the best for table use. A long melon with mottled skin; ripens close to the rind. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

TOM WATSON.—Decidedly the most popular melon grown. Large, long and dark green; fruit of exceptionally fine shipping quality. Rich red flesh, solid, sweet and luscious. Good shipping, a good market, and a fine table melon. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

JORDON'S GRAY MONARCH.—One of the largest melons grown, and a splendid shipper. Long fruit with mottled gray color, good flavor. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

TRIUMPH.—A medium early, extra large melon of splendid quality. Dark green rind, with indistinct stripes; fine appearance. Flesh solid and sweet. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

BRADFORD.—One of the best melons for home use or near by market, but not recommended as a shipping melon. Dark green rind with darker stripes; rather long. Remarkably tender and sweet. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

Okra

CULTURE.—When the ground has become warm, sow thickly in drills 3 feet apart, and when large enough thin out to 8 inches apart in the rows. To keep for the winter use, slice the pods when young and tender into narrow rings; string and hang in shade to dry. One ounce will sow 30 feet of drill.

WHITE VELVET.—A very prolific variety, bearing smooth white pods of splendid flavor. The most popular okra grown. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

TALL GREEN.—Produces in great abundance, dark green pods, of best quality. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.



Triumph.

Mustard

Grown and used like Spinach or Kale. Sow from February to April, or in September and October, broadcast or in drills. One ounce for 100-foot drill, 4 lbs. per acre broadcast.

SOUTHERN GIANT CURLED.—The most popular curled mustard grown in the South; forms a great mass of leaves finely curled and crimped and of good flavor. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

Onion

CULTURE—Large Onions from Seed.—For best crop results, to grow large onions from seed the first year, sow in January and February in hot-beds, and as soon as the weather opens and the sets are the size of goose-quill, transplant to rows 12 inches apart and 4 to 6 inches between the onions. Transplanting is of decided benefit, increasing the yield considerably, in some instances double the yield being reported. They can also be sown in the open ground in February or March, and will make a good crop put in at this time. The Italian, Spanish and Bermuda varieties can also be sown in August or September, and transplanted about the end of October or early in November. Five or six pounds will sow an acre.

Growing Onion Sets from Seed.—To grow onion sets, sow in broad, wide rows, in March or early in April, 40 to 50 pounds per acre, and keep clean of weeds. In late summer, or whenever the tops die, remove the small bulbs, buttons or sets, to a dry place, spread them out thinly on trays made of laths, piling the trays one on top of another, separated by blocks, so that the air can circulate freely between them. The larger sets should be sold for pickling, and only the smallest retained for planting.

PRIZE TAKER.—One of the best of the Spanish varieties. Skin is rich, yellow straw color. Flesh pure white, mild and tender. Pkt., 5c; Oz., 20c; $\frac{1}{4}$ lb., 60c; 1 lb., \$2.00.

EXTRA EARLY WHITE PEARL.—The quickest growing of all white sorts, makes large pearly onions. Tender, mild and of excellent flavor. Seed can be sown thickly in the spring; sets raised and planted out in fall, and large onions will be ready in spring, before any other variety. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; 1 lb., \$2.00.

SILVER SKIN, or WHITE PORTUGAL.—Flesh and skin pure white; flavor mild and sweet. Grows to a good size and ripens early and evenly. Makes a good onion for bunching; for table use, and for pickling purposes. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 90c; 1 lb., \$3.50.

LARGE RED WETHERSFIELD.—The best known red variety. Grown to a large size flattened on ends, but thick. A very hardy, solid and good keeping onion. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 65c; 1 lb., \$2.50.

YELLOW GLOBE DANVERS.—The best known and most largely grown onion. Grows to good size, and ripens solid and heavy. Pkt., 5c; Oz., 20c; $\frac{1}{4}$ lb., 60c; 1 lb., \$2.00.

Onion Sets

Prices on Onion Sets Fluctuate. Current Prices on Request.

YELLOW DANVERS.—Qt., 15c; pk., 75c; bu., \$2.25.

RED WETHERSFIELD.—Qt., 15c; pk., 75c; bu., \$2.25.

SILVER SKIN.—Qt., 15c; pk., 75c; bu., \$2.50.

POTATO or HILL ONION.—Qt., 20c; pk., \$1.15; bu., \$4.00.

EXTRA EARLY WHITE PEARL.—For fall planting only. Prices on application in season.

Parsley

CULTURE.—For spring seeding, sow in February, March or early in April. Soak a few hours, and then sow in rows a foot apart, and cover about half an inch. Parsley is slow to germinate, sometimes two or three weeks in coming up. One ounce will sow 150 feet of drill.

CHAMPION MOSS CURLED.—Beautifully curled and crimped, and the favorite for garnishing and flavoring. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c.

PLAIN or SMOOTH LEAVED.—A very hardy variety; somewhat stronger in flavor than the curled. Pkt., 5c; oz., 10; $\frac{1}{4}$ lb., 25c.



Prizetaker.

Garden Peas

CULTURE.—Peas succeed best in light, rich loamy soil which has been manured the previous season. Plant the smooth varieties in the spring as soon as the ground can be worked, in rows 3 to 4 feet apart, 2 inches deep, giving the taller varieties more room between the rows. The wrinkled varieties are tender, and should be planted later than the smooth kinds. For a succession, plant every two weeks. The dwarf varieties can be planted in rows 2½ to 3 feet apart. Peas grown as a market crop are rarely ever staked, but when the taller varieties are grown for private use, it is a good plan to sow them in double rows and stake with brush. They should be kept clean and the earth worked toward them two or three times during growth. One and a half bushels are required to plant one acre, one quart to plant 100 feet of drill.

TELEPHONE.—One of the most popular of the wrinkled sorts. Fine sugary flavor; large pods, and a good bearer. One of the best varieties for main crop. Height about 4 ft. Pt., 15c; qt., 25c; pk., \$1.25; bu., \$4.50.

POTLATCH.—An extra large wrinkled variety of unsurpassed flavor. Pods long and well filled. Recommended for home use where quality is first consideration. Medium early in maturity. Pt., 15c; qt., 30c; pk., \$1.75; bu., \$6.00.

EXTRA EARLY ALASKA.—This pea is more generally grown by market gardeners and truckers than any other; extra early in maturity and very prolific. Well filled pods of beautiful green color, which they retain longer than other varieties. Pt., 10c; qt., 20c; pk., \$1.00; bu., \$3.75.

GRADUS or PROSPERITY.—The best early wrinkled. Pods are large and well filled and of unsurpassed quality. Can be sown earlier than most wrinkled varieties. Pt., 15c; qt., 25c; pk., \$1.50; bu., \$5.25.

PHILADELPHIA EXTRA EARLY.—The old standard extra early variety. Very similar to first and best, and about the same in quality and height. Pt., 10c; qt., 20c; pk., \$1.00; bu., \$3.75.

FIRST AND BEST.—A very desirable strain of extra early peas, and popular with truckers. Height, 2 to 2½ feet. Pt., 10c; qt., 20c; pk., \$1.00; bu., \$3.75.

BLACK EYE MARROWFAT.—Very largely grown for late crop for market or home use. Very hardy, vigorous and productive. Grows from three to 5 ft. high. Pt., 10c; qt., 20c; pk., 90c; bu., \$3.50.

CLAUDIT.—In general habit and height of vine resembling Alaska, ripening almost at the same time, but with much longer, broader pods. Pods 3 inches in length, straight, handsomely shaped, and well filled at the point. Seed round, light green, dented, height 2½ feet. Pt., 20c; pk., \$1.00; bu., \$4.00.

HORSFORD'S MARKET GARDEN.—Strongly resembling Premium Gem in habit of growth, but about one-third taller. Vines growing 26 to 30 inches high, foliage dark green, pods light colored, straight, about 2½ inches long and blunt. Fit for picking 68 days from planting. Seed green, wrinkled, medium in size. A very popular pea. Pt., 10c; qt., 20c; pk., \$1.20; per bus., \$4.00.



Potlatch Peas.

Parsnip

CULTURE.—A rich sandy loam, deeply worked, is the best for parsnips. Sow in the spring, in drills eighteen inches apart, and cover lightly. Parsnip seed is very slow in germinating, especially when the ground is dry. When two inches high, thin out to 4 or 6 inches apart. One ounce will sow 200 feet of drill; five pounds to the acre.

IMPROVED SUGAR or HOLLOW CROWN.—The standard variety; smooth, tapering roots, and of good flavor. Fine for both table and stock. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 50c.

Pepper

CULTURE.—Sow in hotbed in February or March, and transplant to open ground in May in rows 2 to 3 feet apart, 15 inches between the plants; or when the ground becomes warm, sow in open ground and set out as above. When about six inches high, apply liquid manure or some good fertilizer.

CHINESE GIANT.—An enormous, sweet pepper, growing from 12 to 15 inches in circumference. Plants grow about 2 ft. high and are very prolific. Flesh tender, mild and sweet. Used for slicing like tomatoes or stuffed as mangoes. Very desirable. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

RUBY GIANT.—Not quite as large as Chinese Giant, but very active in appearance and very prolific. Flesh mild and sweet. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

LARGE BELL or **BULL NOSE.**—An old standard sweet pepper. Ripens early and uniformly. Flesh of excellent quality, and largely used in salads. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

LONG RED CAYENNE.—The standard hot pepper. Making long, slender, bright red pods about 3 to 4 inches long. Used in the green and ripe state for pickling and seasoning. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

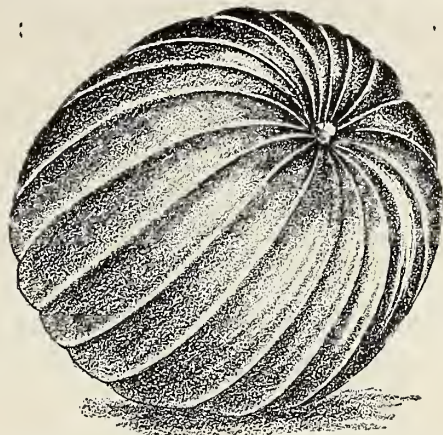


RED CLUSTER.—A splendid hot pepper for making sauce and pepper vinegar. Pods grow about an inch long, and when ripe have a brilliant scarlet color. Very prolific. Pkt. 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Pumpkin

CULTURE.—Plant in May, in hills 8 to 10 feet apart, mixing well-rotted manure in each hill. Put 8 to 10 seeds in each hill, and cultivate till the vines get strong, when they should be thinned out, leaving two or three of the strongest in each hill. When planted in corn plant at the same time as the corn, in every fourth row, 10 to 12 feet apart in the rows, letting the hill of pumpkins take the place of a hill of corn. One ounce will plant 20 hills; three pounds, one acre.

LARGE CHEESE.—An exceedingly large pumpkin; for both table and stock. Very thick flesh; sweet and of fine quality and a good keeper. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.



VIRGINIA MAMMOTH.—This is undoubtedly the finest pumpkin raised; Growing to an enormous size; its keeping qualities are unexcelled and it is adapted to most any climate or soil. Fruit is oval shaped. Rich golden color; flesh of fine flavor, and a very desirable pumpkin for table as well as stock use. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50.

SUGAR or **PIE.**—A small sweet pumpkin used mainly for making pies. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

CORNFIELD PUMPKIN.—Used mainly for stock feeding. Planted in corn fields making enormous crops with little cultivation. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 35c.

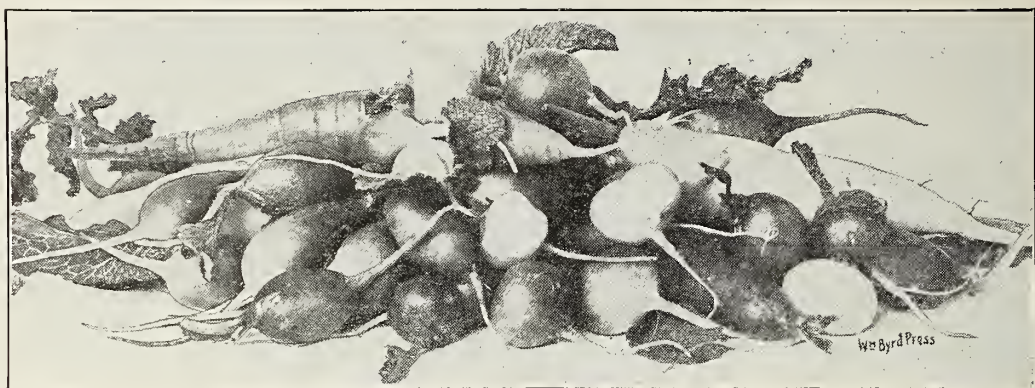
Spinach

Sow early in spring in rich soil in drills 1 inch deep, two feet between the rows. For winter or spring crop, sow in September and October. One ounce for 100-foot drill; 20 lbs. to an acre.

NORFOLK SAVOY or **BLOOMSDALE.**—The best variety for fall or spring seeding. Quick growth, hardy; beautifully curled leaves. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 35c.

LONG STANDING.—Leaves thick and fleshy; not liable to run to seed quickly. A good variety; can be sown fall or spring. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 35c.





Radish

To be tender and crisp, Radishes must be grown quickly, and this requires rich soil and moisture. Begin as early as possible in spring and sow at intervals of about 10 days in a light, rich, deeply worked soil. Can also be forced in hotbeds. For fall and winter sow in August and September. One ounce sows fifty feet.

EARLY FORCING SCARLET GLOBE.—The earliest radish and best for forcing. Small top, bright red color. Beautiful appearance. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

EARLY SCARLET TURNIP.—A quick growing round red radish with small top. Crisp and tender. A good variety for outdoor planting. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

GOLDEN GLOBE SUMMER.—The best summer radish. Round shape, golden yellow in color. Crisp and tender. Withstands hot weather. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.



Early Forcing Scarlet Globe.

FRENCH BREAKFAST.—A white tipped olive shaped variety, and one of the best forcing radish. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

EARLY WHITE TIPPED SCARLET.—Very early, round shape, scarlet roots with white tip; attractive appearance. Quality crisp, tender and mild. A favorite with truckers. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

EARLY WHITE TURNIP.—Pure white turnip shaped radish. Early in maturity and of good flavor. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

CRIMSON GIANT GLOBE.—A large early variety. Round with deep crimson color. Tender and crisp. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

LONG SCARLET.—A long, smooth, bright scarlet radish. Very attractive in appearance; crisp and tender. Fine for forcing. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

ROSE CHINA WINTER.—The best winter variety. Cylindrical in shape, rose color. Flesh white. Keeps crisp and tender throughout the winter. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

WHITE STRASBURG.—Large; long, with solid meat. Pure white in color. A splendid variety for summer and fall. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

Rhubarb

Set out in the early Spring or Fall in deep worked soil four feet apart each way. Mulch freely with manure or coarse litter. After stalks are well rooted and have grown freely, they may be used, and with care will last for years.

LINNAEUS.—The best variety grown. Makes fleshy stalks of best quality. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

RHUBARB ROOTS.—10c each; \$1.00 per doz.

Salsify or Oyster Plant

CULTURE.—Sow in March or April in a rich, light, deeply worked soil, in rows 18 inches apart, and thin out to 4 to 6 inches. Do not use coarse or fresh manure; it will make the roots ill-shaped and uneven. Cultivate often to keep down weeds. It is perfectly hardy, and may remain out all winter. Can also be sown in May and June, provided we get seasonable weather or boards be used to get the seeds up and shade the young sprouts until they get well established. One ounce will sow 50 feet of drill; eight lbs. to one acre.

MAMMOTH SANDWICH ISLAND.—Large and best variety, vigorous grower, with long, large white tapering roots. Oz., 10c; $\frac{1}{4}$ lb., 35c; 1 lb., \$1.25.

Squash or Cymling

CULTURE.—After danger of frost is past, plant in a warm well-pulverized, rich soil, mixing well-rotted manure with the soil in each hill. Plant eight or ten seeds to the hill; the bush varieties 4 to 6 feet apart, the running sorts 8 to 10 feet. When well grown, thin out, leaving three of the strongest plants in each hill. Summer sorts, one ounce to forty hills, four to six pounds to an acre; winter sorts, one ounce to ten hills, four to five pounds to an acre.

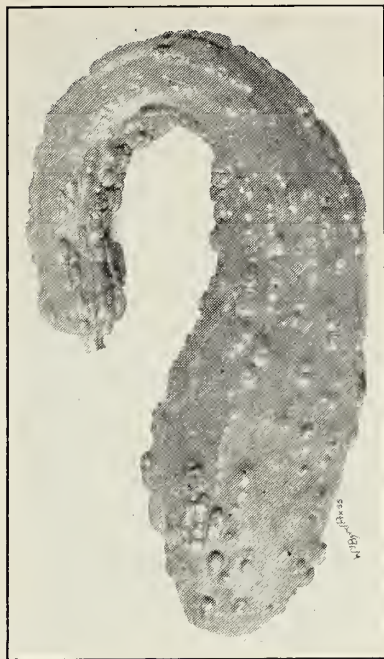
EARLY WHITE BUSH.—The standard White Bush squash or cymbling. Grown extensively by truckers for main crop. Very prolific and an excellent shipper. Also grown for hog feed. Oz., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 50c.

EVER BEARING.—A large white squash similar in appearance to White Bush. Not as early, but more prolific, and will continue to bear during the whole summer. Also known as Running Squash. Used extensively for stock feeding. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.



Early White Bush.

EARLIEST PROLIFIC WHITE BUSH.—This is the earliest variety of white bush squash in cultivation, and is a money maker for truckers. Ten days earlier than Early White Bush; same growth and same shape fruit. Scallops not so pronounced; flesh thick, firm and very tender. Oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.



Giant Summer Crookneck.

HUBBARD SQUASH.—One of the best winter varieties. Heavy fruit of bright orange flesh, fine grains, sweet and richly flavored, a good keeper, and unsurpassed for squash pies. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

GIANT SUMMER CROOKNECK.—A beautiful variety for summer crop, bears early and continues through the summer. Of true crookneck type; rich golden yellow color. Thickly warted and of excellent table qualities. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

Disking Land at Wrong Time Cause of Heavy Loss to Farmers

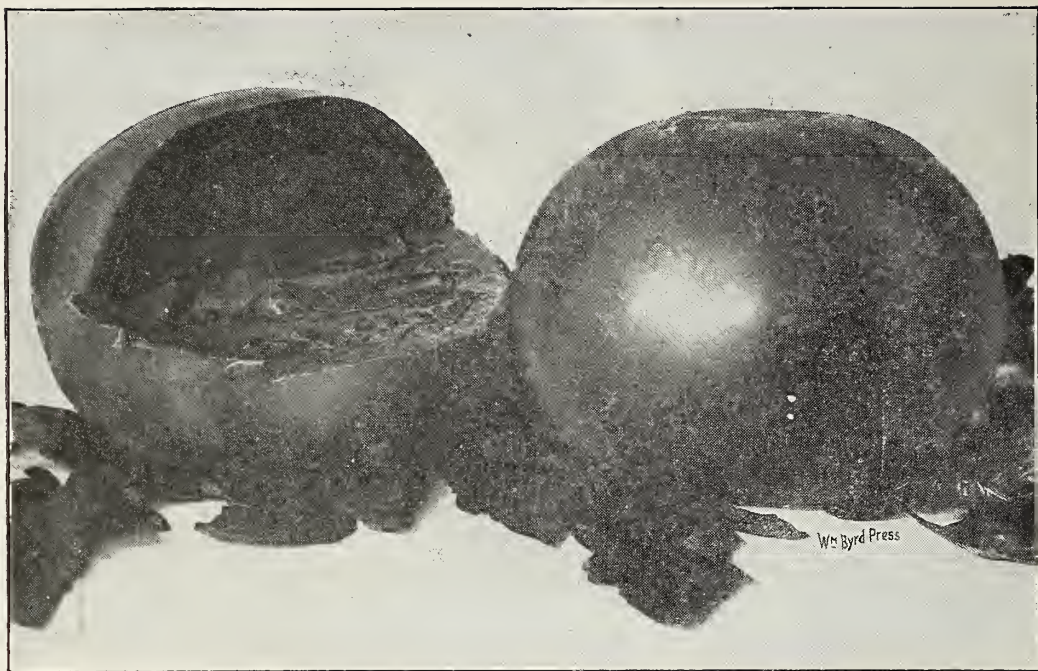
Do not harrow or disk your land immediately after plowing—let it rest at least 12 to 15 days, according to the season, to allow the air to penetrate, the weeds to rot, foul seeds to sprout, and the microbes to multiply; a process of fermentation called ripening, and without which you cannot have your land in proper physical condition any more than you can have good bread without leaven; you can give your land the proper chemical condition at any time by simply applying your 2-8-2, 3-8-3, or other commercial fertilizers, but the proper physical condition cannot be obtained by sheer force, you cannot push it; like dough, it must have the required time to rise or ripen.

After allowing this process of fermentation to take its course, your land is ready for disk or harrow; these are two great instruments for the farm, but in the hands of the farmer who does not know when his land is ripe or does not allow it time to ripen, they can do much harm, and if the farmer neglects to give his land the above mentioned opportunity of ripening, it should be no surprise to him to find the same sour, constipated and unclean; onions, cockrel and patridge, peas in his wheat fields, cheat and onions in his oats, plantain and wild carrots in his clover, and weeds and grass everywhere.

Let your land ripen before disking, and you will have better and cleaner crops, and less work to keep them clean.

TO INSURE A STAND OF CRIMSON CLOVER

Sow $\frac{1}{2}$ bu. Buckwheat per acre with your early seedings of Crimson Clover. The Buckwheat affords protection for the clover from the hot sun, and furnishes a good crop of fine chicken feed, which can be harvested without detriment to the growing clover.



The Ponderosa.

Tomato

CULTURE.—Sow in hotbeds or shallow boxes in the house early in the spring, transplanting in the beds to promote root growth, and when danger of frost is over, set 3 to 4 feet apart outside. Expose to the air as much as possible to harden them, and water freely when transplanting, shading them in a few days from the sun until thoroughly established. Earliness may be promoted by growing in pots, shifting to larger size as they become filled with roots. Earlier fruits may also be had by allowing only the original stem to bear. If the plants are staked, they may be grown closer together and produce more perfect fruits.

JUNE PINK.—Considered an improvement on Earliana. Extra early with beautiful pink color. Medium size, smooth and prolific. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.50.

EARLY ACME.—Medium early and will continue to bear until frost. One of the oldest varieties in cultivation, but one of the best. Purple in color; almost round. Smooth, solid and of good flavor. Never failing favorite. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.40.



Early Acme Tomato.

MATCHLESS.—One of the best main crop tomatoes. Very solid; few seed; large smooth fruit. As a main crop, it is unsurpassed. Pkt. 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.50.

EARLIANA.—A standard extra early variety. Largely grown by market gardeners. Bright red, smooth and attractive in appearance. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.50.

BONNIE BEST.—A large, early, smooth, bright red tomato. Medium in size. Uniform and attractive. Growing in favor for market and home use. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.75.

NEW STONE.—Considered the best tomato for main and late crop. Large, solid, bright scarlet. Very firm, uniform and hardy. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.40.

PONDEROSA.—An extra large and very handsome, bright red tomato. Flesh thick, solid and of fine quality. Especially recommended for home gardeners. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 75c; 1 lb., \$2.50.

YELLOW PEAR.—Small pear shaped variety, used for preserving. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Bright Tobacco Seed

WARNE.—A splendid variety for bright yellow wrappers. Grown to a large size, of medium breadth, and very fine grained. Thick and silky; makes the finest quality leaf. Oz., 25c.

IMPROVED YELLOW ORONOKO.—Developed from the old standard yellow Oronoko, and more extensively planted than any other variety of the yellow type. Of large, erect growth, broad leaves and fine texture. Oz., 25c.

SLATE'S IMPROVED GOLD LEAF.—This is conceded to be the best bright tobacco on the market, and is fast replacing all other varieties. It can be topped higher than other varieties, and will still retain its size and weight of leaf. The leaf is long, broad, and very similar in shape to that of the Warne, but less inclined to have green shoulders. Oz., 50c.



Copyright 1912

Turnip and Ruta Baga

CULTURE.—Spring sowing should be put in early so that they will attain a good size before hot weather, otherwise they will become tough and bitter. For spring sowing the Milans or other early varieties are best. For the regular crop, sow the early sorts in July or August, the later sorts during August, and the salad varieties during August and September. Sow either broadcast or in drills 2 feet apart, thinning out to 6 inches, and roll the ground after sowing. Rutabagas should be sown in July and early in August, and earthed up as they grow. Sow $1\frac{1}{2}$ pounds to the acre in drills, 2 lbs. broadcast; salad turnips 3 lbs. to the acre.

EARLY FLAT DUTCH.—An extra early pure white flat growing variety. Recommended for early market. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

EARLY PURPLE TOP STRAPLEAF.—Flat, white with purple top. Fine grained and tender. Used for early market and table. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

IMPROVED AMERICAN PURPLE TOP WHITE GLOBE.—The most popular turnip for market and table use. Makes large, globe shaped roots, pure white, with purple top. A heavy yielder and unsurpassed in quality. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

LARGE WHITE NORFOLK GLOBE.—Makes large, round, handsome, white roots, excellent for table and stock. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

WHITE EGG.—A quick growing, egg shaped, pure white variety. Very sweet, firm, and mild. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

LONG WHITE COW HORN.—A very attractive quick growing turnip. Used especially for stock feeding. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

FENNEL—Pkt., 5c; oz., 10c.

LARGE YELLOW, or AMBER GLOBE.—Of large size, globe shaped, solid yellow flesh, green top. Fine for table and stock. Keeps firm and sweet throughout the winter. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

YELLOW ABERDEEN, PURPLE TOP.—A splendid keeping variety with firm, solid, yellow meat. Keeps throughout the winter, and especially recommended for stock feeding. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

IMPROVED AMERICAN PURPLE TOP RUTABAGA.—An improved strain of the finest yellow fleshed rutabaga grown. Hardy, sweet and a good keeper. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

Salad Varieties

SOUTHERN PRIZE, or DIXIE.—Considered the best salad variety known. Very hardy, withstands cold, and makes beautiful luxuriant salad. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

SEVEN TOP.—The old standard popular salad variety, grown exclusively for this purpose. Oz., 5c; $\frac{1}{4}$ lb., 10c; 1 lb., 30c.

Herbs

LAVENDER—Pkt., 5c; oz., 25c.

SWEET MARJORAM—Pkt., 5c; oz., 15c.

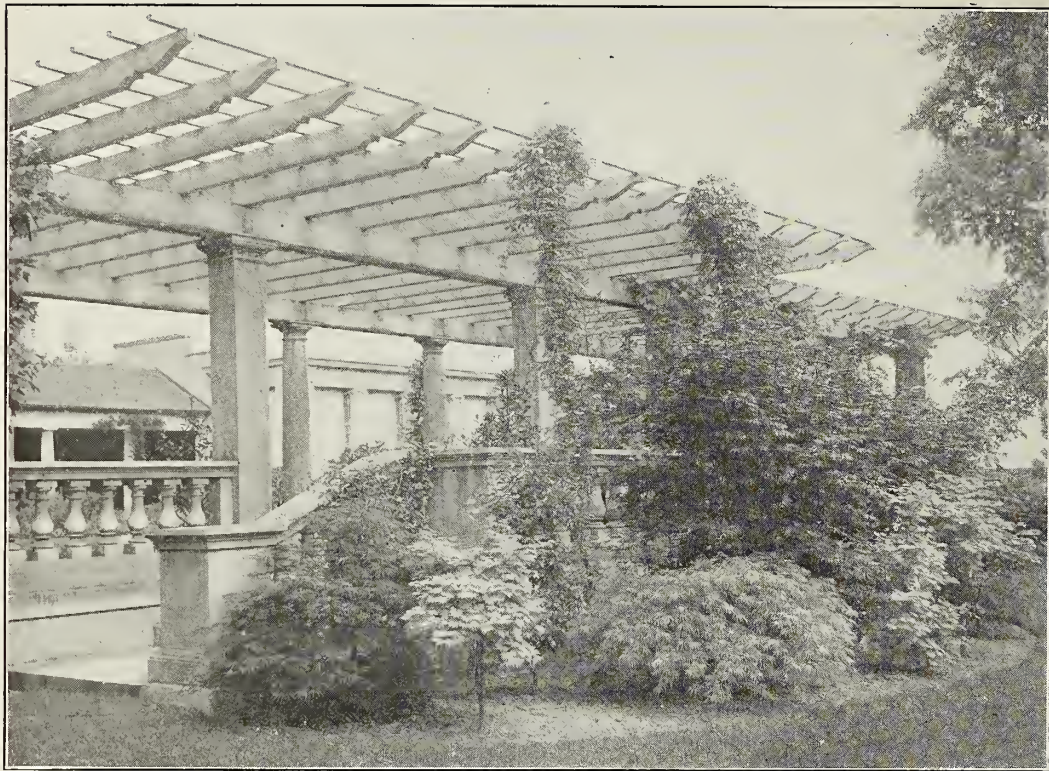
SAGE—Pkt., 5c; oz., 15c.

THYME—Pkt., 5c; oz., 30c.

SAVORY—Pkt., 5c; oz., 15c.

DILL—Pkt., 5c; oz., 10c.

CARAWAY—Pkt., 5c; oz., 10c.



Lawn Grasses and Requisites

PREPARATION AND CARE OF LAWNS.

—In order to secure a satisfactory lawn thorough preparation of the soil is absolutely necessary. The ground should be deeply plowed or spaded, thoroughly pulverized and raked, removing all roots, sticks and stones. After getting the ground perfectly in A1 condition, the seed should be sown at the rate of one pound to 300 sq. ft. From 60 to 70 lbs. to the acre. After the seed is sown, the lawn should be gone over with a heavy roller, or if the ground is too wet, the seed should be raked in lightly with a small hand rake. It is best not to use stable manure unless thoroughly rotted, as the same contains numerous seeds which prove a menace to lawns. The best months for seeding are February, March, April, September, October and November. To renew old lawns, rake over the bare and thin spots with a sharp rake, and sow fresh seed, covering the same by reraking, and applying roller.

GROSSMANN'S PERMANENT LAWN MIXTURE.—This mixture of grasses is recommended for country lawns, large areas, and in instances where the facilities for watering and taking care of the same are not as perfect as the city. The mixture consists of hardy grasses combined so as to make a permanent, smooth, green sod, withstanding heat and droughts of summer, as well as cold of winter. Price per lb., 25c; 6 lbs., \$1.00; 100 lbs., \$15.00.

PURE RAW BONE MEAL.—The best and most permanent fertilizer for lawns. Should be used freely in the preparation of new lawns, and should be applied at regular intervals to old and established lawns. 8 lb. pkg., 25c; 50 lb. bag, \$1.25; 200 lb. bag, \$4.00.

SHADY LAWN GRASS.—This is a special mixture of grasses peculiarly adapted to shady lawns, and will do well under trees and shrubs. Price per lb., 25c; 5 lbs. for \$1.00; 100 lbs., \$15.00.

PURE LAND PLASTER.—Very beneficial to lawns if applied as a top dressing during the summer whenever the lawns have been cut, retaining and holding the moisture in the land. Price: 200 lb. bag, \$1.00.

GROSSMANN'S EVERGREEN LAWN MIXTURE.—This special mixture is composed of the very highest grades and most suitable grasses in proper proportion to insure a permanent, smooth and velvety lawn. It is well adapted to various soils, and will last forever with proper care and attention. We recommend this lawn grass to all who are in position to give their lawns proper attention, and who desire the finest texture, color and permanency of lawn. Price per lb., 25c; 5 lbs., \$1.00; bu. (20 lb.), \$3.50.

GRAINS & GRASSES

THE SEEDING OF GRASS AND CLOVERS

To begin with, let us bear in mind that land requires as much careful preparation and attention for the seeding of these field crops, as it does for the smallest vegetable seeds, and that we cannot expect to harvest two to three tons of hay per acre on land that has not had the proper treatment and nourishment. We should get out of the old habit of making up our mind at the last moment to put this or that piece of land in grass or clover, because, as a rule, this or that land is not in proper condition for seeding; we should try to look and plan ahead from year to year, so our land may be ready and in such physical condition as to insure good returns for what we have done for it.

PREPARATION OF LAND

Begin the preparation of land by feeding it, viz.: Adding humus through green fallow crops, such as cowpeas, crimson clover, vetch, etc.; any of these crops will more than pay for themselves in either cured or green feed, and the stubble turned under will enrich the soil in nitrogen and humus, as these plants obtain their supply of nitrogen from the air and give it to the soil. Should the land be thin, an application of three to four hundred pounds of acid phosphate per acre will help to give these crops sufficient growth for the purposes desired.

Having supplied the land with food in the form of humus, we should give it a sweetener—Lime—an application of 1,000 to 2,000 pounds per acre, according to the character of the soil, will aid the land to digest the food given it, and will render available for the use of the grass and clover plants, the various plant foods contained in the soil. This application of lime should be turned under with the green fallow, or when land is disked preparatory for seeding. A further application of 400 to 500 pounds of Pure Raw Bone Meal per acre at seeding time will increase the yield of hay and give longer life to the plants.

PLOWING, DISKING AND SEEDING

In the seeding of grass and clovers, a firm, well-prepared seed bed is a most important factor, and to obtain this the land should be deeply fallowed and allowed to remain so for at least two weeks before touching further. This allows the ground to settle, weed seeds to sprout (which are afterwards killed by disking), and the air

to penetrate the soil thoroughly; after this has been accomplished, disk the land thoroughly until the surface is in first-class condition; then sow the seed carefully, preferably with a Cahoon Seeder, and cover lightly to a depth of about one-half inch; then run the roller over the whole, unless the land is too wet or inclined to bake.

TIME OF SEEDING

Grass and clovers can be seeded in Spring, in February, March and April, or in Fall, during the months of September and October. In Fall seeding it is customary to sow either oats, wheat or rye with it, which method affords two crops on same land, the grain crop being harvested in early summer, and a cutting of hay being made later in the season. However, it is our belief that better results are obtained by seeding without grain, as generally the grain crop is removed from land during a hot dry spell, and the grass plants, tender from being shaded by the grain, are more or less damaged and killed by the hot sun, the result often being a poor stand, and consequently a short hay crop. A point in favor of the grain addition, however, is the protection the same affords the young grass during the winter.

Grass and Clover Mixtures

We very strongly advise mixtures of Grasses and Clovers in place of only one variety, as being productive of better quality and heavier yields of hay, and better and more permanent pasture, but care should be taken to use such varieties together as will suit the same soil and mature at about the same time, in order to secure the full benefit of growth and feeding value of each variety. Grossmann's Special Clover and Grass Mixtures are not put up by guesswork or by inexperienced novices in the seed business, but are the results of actual and practical experiences and careful tests for thirty years, and the various grasses and clovers are used in such combinations and proportions as have been proven to give the best results for the purposes intended. The following four mixtures are especially recommended for the purposes as designated, as they have been thoroughly tested for years with never failing results. Thousands of pounds of these mixtures are sown by our farmers each year, and we are constantly receiving unsolicited praise and words of satisfaction from those who are using them.

TRY THIS AS A HAY CROP

Sow in September, per acre: 2 bus. Rust Proof or Appler Oats with 10 lbs. Hairy Vetch, disk in, then drag, and sow 10 lbs. White Bloom Crimson Clover and brush in; the following June you can cut $1\frac{1}{2}$ to 2 tons of the very best quality hay without robbing the land, as the leguminous properties of the Vetch and Clover leave the soil in fine condition for the following crop. Can be followed with Corn, Cowpeas or late Irish Potatoes.



Timothy.

Our Upland Hay Mixture

This mixture is especially recommended for hay crops on light or loamy uplands, where it will always yield abundantly. Can also be used for permanent pasture. Consists of the following grasses and clovers:

Orchard Grass	Red Top Grass
Tall Meadow Oat Grass	Perennial Rye Grass
Meadow Fescue Grass	Red Clover
Alsike Clover	

Sow 30 to 35 lbs. per acre. Price per lb., 17c; per 100 lbs., \$16.00.

Our Lowland Hay Mixture

This mixture is especially proportioned for hay crop on stiff, heavy, or low lands, but will also make good pasture, or can be turned into pasture after cutting off hay crop. Composed of the following grasses and clovers:

Red Top Grass	Tall Meadow Oat Grass
Timothy	Sapling Clover
Meadow Fescue	Alsike Clover

Sow 30 lbs. per acre. Price per lb., 17c; per 100 lbs., \$16.00.

Our Upland Pasture Mixture

Recommended for permanent pasture on light, loamy uplands, but will also make a good crop if desired to cut. Composed of the following clovers and grasses:

Meadow Fescue	Perennial Rye Grass
Canada Blue Grass	Orchard Grass
Kentucky Blue Grass	Red Clover
Red Top Grass	Alsike Clover

Sow 30 lbs. per acre. Price per lb., 17c; per 100 lbs., \$16.00.

Our Lowland Pasture Mixture

Recommended for permanent pasture for stiff, heavy, or low lands, but will also make good hay crops. Composed of the following grasses and clovers:

Timothy	Tall Meadow Oat Grass
Red Top Grass	Red Clover
Meadow Fescue Grass	Alsike Clover
Kentucky Blue Grass	

Sow 25 to 30 lbs. per acre. Price per lb., 17c; per 100 lbs., \$16.00.

Grasses and Clovers

As prices on all field seeds are constantly fluctuating, and are subject to change without notice, we will gladly quote lowest current prices at any time on application. Prices given in this catalogue are prevailing January 1, 1916.

ORCHARD GRASS.—This is one of the most reliable grasses for hay or pasture in this section, making quick and vigorous growth from early spring to winter. Orchard grass succeeds well on most any soil, but is best adapted to loamy uplands or moderately stiff soil. It is especially adapted to sow with tall Meadow Oat Grass and Red Clover, which makes a fine hay mixture.

Sow 2 bushels per acre; or, if used with other grasses, 1 bushel of Orchard Grass, 1 bushel Tall Meadow Oat Grass, and 8 pounds Red Clover. Price per bushel, \$2.50.

TIMOTHY.—This is considered the most popular, nutritious, and salable of all hay grasses. Best adapted to clay or heavy loam, rich low lands or bottoms, but will also prove successful on rich uplands, providing the same contains plenty moisture. Timothy is largely used with Red Top or Herds Grass, Sapling Clover and Alsike, as these varieties ripen at the same time, and the combination yields large crops of best quality hay. Timothy, sown by itself, requires about 12 pounds per acre. A mixture of timothy, red top, and sapling clover requires 8 pounds of timothy, 6 pounds clover, 6 pounds fancy red top per acre. This mixture also furnishes a splendid pasturage. Price per lb., 10c; per bu., \$4.00.

TALL MEADOW OAT GRASS.—A very valuable grass for the South. Withstands heat and drought well, and succeeds on dry light soils. Recommended for pasture or hay. It is usually sown with orchard grass and Red Clover, in which connection it really gives best results. It is especially adapted for our light or sandy soils. Sown by itself at the rate of 3 bushels per acre, or 1 bushel Orchard Grass, 1 bushel Tall Meadow Oat Grass and 8 pounds Red Clover. Price per bushel, \$1.85.



Red Top or Herds Grass

(Fancy, Recleaned)

This is one of the most satisfactory grasses throughout the South, well adapted to all soils and situations, from light, sandy upland soils, to stiff and moist low grounds. After once being established, herds grass thickens and improves year after year, making a thick, compact sod for permanent pasturage. It is largely used for mixing with other grasses and clovers, and is one of the few grasses that will successfully withstand yearly overflows. It is generally sown with timothy and sapling clover, which makes a fine hay mixture. It requires about 10 lbs. of recleaned seed per acre; or, if sown in connection with other grasses, use 5 lbs. herds grass, 8 lbs. timothy, and 6 lbs. of sapling clover per acre. Price per lb., 16c; per 100 lbs., \$15.00.

Kentucky Blue Grass

Kentucky Blue Grass make the finest pasturage and lawn grass, and succeeds best on limestone land. Being easily affected by heat, we do not recommend it for this section, unless mixed with other grasses, and unless the soil has been well limed. Containing the highest nutritive value of our grasses, it should be used with other grasses and clovers whenever pasturage is desired. If sown alone use 40 to 50 pounds per acre. Price per lb., 15c; per bushel, \$1.50.

Perennial Rye Grass

A quick growing, early maturing grass, furnishes good grazing and hay, and is well adapted for mixing with other grasses. Makes a quick, leafy sod, and is especially recommended for early grazing. Sown at the rate of 2 bushels per acre. Price per lb., 10c; per bushel, \$1.25.

Italian Rye Grass

Recommended particularly for fall seeding, yields from two to three cuttings of nutritious hay per year. Best adapted to rich, loamy soils, with sufficient moisture. Price per lb., 10c; per bushel, \$1.25.

Meadow Fescue

A very valuable grass for Virginia and the South in general, succeeding well in nearly all sections, and highly recommended for use in pasturage and hay mixtures. Especially suitable for sowing with red top and timothy. It makes a splendid fall and winter pasturage, remaining green almost throughout the winter. Sown by itself, use two bushels per acre; if sown in connection with other grasses, 1 bushel meadow fescue, 5 opunds fancy red top, and 6 to 8 pounds timothy per acre. Price per lb., 15c; per bushel, \$1.80.



Red Top, or Herds Grass.

Sudan Grass

A sweet, heavy yielding annual grass, yielding from three to four cuttings of good hay. Very quick growing and withstands drought well. Highly recommended for a quick hay crop or for green food during summer months. Plant from March to July in 18 to 30 inch rows, five pounds to the acre, or broadcast at the rate of ten to twelve pounds per acre. Our stock of Sudan Grass is certified to be free of Johnson Grass and true to name. Price per single pound, 20c; per 10 lbs., 15c per lb.; per 100 lbs., 10c per lb.

Velvet Grass

This grass is increasing in favor in this section, having been experimented with in a small way with pleasing results. It begins its growth early in spring and furnishes pasturage sooner than any other grass. It seems to be particularly well adapted for light and upland soils, and spreads and perpetuates itself until plowed up. We unhesitatingly recommend it with mixtures of orchard grass and tall meadow oat grass, for both hay and pasturage. Price per lb., 20c.

Clovers

RED CLOVER.—This is the standard hay, pasturage, and soil improving crop throughout the world. It yields 2 to 3 cuttings of most nutritious hay per year from two to three years with one seeding. It is generally used in connection with orchard and tall meadow oat grass, and this mixture gives larger yields and better quality hay than if sown by itself. Red Clover is used in almost all mixtures of clovers and grasses for hay and pasturage. A good crop of red clover plowed under is the finest fertilizer to be had. Sow ten pounds per acre. If mixed with other grasses, use 8 lbs. red clover, 1 bu. orchard grass, 1 bu. Tall Meadow Oat grass. Price per lb., 22c; per bu., \$12.00.

MAMMOTH, or SAPLING CLOVER.—Similar to red clover in appearance and habits of growth, but larger and later in maturity. Best adapted to sow with timothy, meadow fescue and red top, maturing about the same time as these grasses. Sown by itself, use 10 to 12 lbs. per acre. If mixed: 6 lbs. clover, 8 lbs. timothy, and 4 lbs. red top. This last mixture makes a very valuable hay. Per lb., 25c; per bu., \$12.75.



Crimson Clover.

ALSYKE.—Alsyke Clover is growing in favor yearly, and is deservedly one of the most popular clovers grown. It grows thicker and finer than red clover; is considered better hay and yields more and better grazing. Very hardy, resisting heat and drought, as also cold weather, and stands longer than the red clover. In this section it is very generally mixed with red clover at the rate of 3 lbs. alsyke, 7 lbs. red clover per acre. Also highly recommended for use in pasturage and hay mixtures. Price per lb., 20c; per bu., \$11.00.

CRIMSON CLOVER.—This is our great soil improver and redeemer of worn out lands. A crop of crimson clover plowed under is equal to a heavy application of stable manure, and is the cheapest and most effective improver of soils in the agricultural world. It is an annual plant, and is sown in July, August, September and October at the rate of 15 to 20 lbs. per acre. It has been very generally sown in corn at the last working in July and August, but we are rather inclined to advise the discontinuance of this method, as our experience has taught and shown us that these early seedings are very uncertain, and have cost our farmers hundreds of thousands of dollars' loss in seed. We would rather recommend September and October seedings. Crimson Clover offers a cover crop for winter, early pasturage, and green feed for spring, and nutritious hay crop and increased fertility of the soil. Every available foot of land on the farm should lb., 11c; per bu., \$6.00.



Red Clover.

WHITE BLOOMING CRIMSON CLOVER.

—Same as the red crimson clover, but has white bloom, and is later in maturity. The white bloom is more desirable for hay and forage, and when sown with rust-proof oats makes the most desirable hay. We also recommend very highly from personal experience, the seeding of rust-proof oats, white bloom crimson clover and hairy vetch, which combination yields exceedingly heavy crops of most nutritious hay. This combination should be sown at the rate of $1\frac{1}{2}$ bus. rust proof oats, 10 lbs. white bloom clover, 10 lbs. hairy vetch per acre. Price per lb., 12c; per bu., \$7.00.

WHITE BOKHARA, or SWEET CLOVER.

—This valuable clover is used as a soil improver, being especially recommended for hill sides and wash lands, as it will make a catch on most any soil. It is a splendid pasturage clover, and is beginning to find favor as a hay crop if cut when young. Sweet clover is also used as an inoculation for alfalfa, and is also sown for bees. Price per lb., 16c; per 100 lbs., 15c.

JAPAN CLOVER is considered very valuable as a grazing crop. Once started, it spreads rapidly making a steady growth of nutritious pasturage. Succeeds well on most any land. We recommend Japan Clover for waste or worn out soils, on which it will not only yield good pasturage, but will improve the land to considerable extent. Sow at the rate of ten to fifteen pounds per acre in March or April. Price per lb., 20c; per bushel of 25 lbs., \$3.50.



Alfalfa.

WHITE DUTCH CLOVER.—Largely used in lawn and pasture mixtures, and is well adapted to our soils. It is voluntary in growth and will cover the ground well and makes a good pasturage. Generally sown in a mixture with other grasses; not suitable for hay. Price per lb., 50c.

ALFALFA.—Alfalfa is acknowledged the king of all hay crops. It will yield more cuttings and make larger yields of most nutritious hay than any other crop. Once established, it will last for years, giving 4 to 5 cuttings each season. Price per lb., Best American grown. Lb., 22c; bu., \$12.50.

PREPARATION OF SOIL AND METHODS OF SEEDING.

Alfalfa should be sown on improved soils, care being taken that the same is absolutely perfect in drainage, with a clay subsoil. It will not thrive on land that is inclined to be wet or where roots will reach water near surface. The land should be sown in cowpeas or crimson clover, one or two years previous to the seeding of the crop. It should then be limed at the rate of one to two tons per acre, and should be thoroughly and well prepared with a firm seed bed before seeding. The seed should be sown in September at the rate of 25 to 30 lbs. per acre, lightly covered and rolled. An application of 400 to 600 lbs. of pure bone meal per acre at the time of seeding will prove a paying investment. Alfalfa should be cut before it reaches full bloom, which causes it to stool out better, and thicken root growth. Alfalfa should always be sown alone, without other grasses or clovers. If the land requires inoculation, we recommend soil inoculation at the rate of 500 to 600 lbs. of soil derived from well established alfalfa fields. This inoculation proves much more satisfactory than the so-called artificial inoculation or cultures. In seeding grass and clovers, we recommend a mixture of 3 to 4 lbs. alfalfa seed per acre on all lands adapted to alfalfa. This gives the necessary inoculation in case the farmer determines to sow alfalfa in the future.

Soja Beans

MAMMOTH YELLOW.—This is the largest growing and most popular of all soja beans, making larger yields of both forage and seed than other varieties. If planted for seed purposes, they should be put in in the middle of May or 1st of June, as they require a full season for maturity. Price per bu., \$1.75.

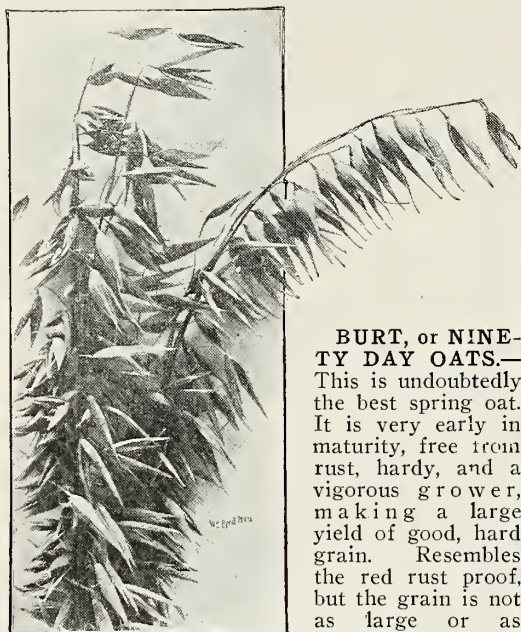
WILSON BLACK.—This is a quick growing, early maturing variety, suitable for short season. Grows to a height of $2\frac{1}{2}$ to 3 ft. on good land; very prolific and ready to cut within 90 days after seeding. Price per pk., 70c; bu., \$2.50.

HOLLYBROOK EARLY.—These make a quicker growth and mature crop two to three weeks' earlier than Mammoth Yellow. Large yielder of both forage and beans. Price per peck, 60c; per bushel, \$2.00.

TAR HEEL BLACK.—Dark green foliage, slightly earlier than Mammoth Yellow; heavy growth of vine, upward in habit, and a heavy yielder of beans. Especially recommended for hog pasture. Price per peck, 60c; per bus., \$2.00.

BROWN SOJAS.—A very desirable variety, making large growth of vine and beans. Considered better than the Mammoth Yellow. Price per peck, 60c; per bushel, \$2.00.

Seed Oats



BURT, or NINE-DAY OATS.—This is undoubtedly the best spring oat. It is very early in maturity, free from rust, hardy, and a vigorous grower, making a large yield of good, hard grain. Resembles the red rust proof, but the grain is not as large or as heavy; growth is

somewhat taller. Price per bushel, 75c.

VIRGINIA GRAY WINTER, or TURF OATS.—This is the old standard and favorite winter oat for Virginia, and is more generally sown than any other oat. Is very hardy, and a sure cropper. While generally sown in the fall, it can also be sown in the spring up to about March 10th to 15th. Price per bushel, 75c.

TEXAS RED RUST PROOF OATS.—A very popular and desirable oat throughout the South. Especially adapted for heavy soils of good fertility, where it yields abundant crops of large, heavy grain. This variety does not grow as tall as the Virginia Gray, and requires rather better land than the same. It is largely used for sowing with vetch and white bloom crimson clover as a hay crop. Can be sown either fall or spring. Price per bushel, 70c.

BANCROFT OATS.—Experiments made with this strain of oat proves it to be one of the largest yielding and surest-cropping of all oats. It is a rust proof variety, maturing in about 95 days from seeding, making heavy yields of grain and abundance of straw. Price per bus., 80c.

BLACK SPRING OATS.—A heavy black seeded spring oat, making a good crop of grain; quick growing and an old favorite. Price per bu., 70c.

APPLER OATS.—Improved variety of the Rust Proof type. Makes a strong, quick growing oat; large bunchy heads, with heavy grain. One of the best and most reliable rust proof oats for the South. Price per bushel, 85c.

WHITE SPRING OAT.—A large, heavy white oat for spring seeding only, makes a splendid yield on good land. Price per bu., 70c.

Field or Cow Peas

Cow Peas are one of the most important, most advantageous, and best paying crops for the farmer through the South. As an improver of soil, they are unsurpassed; they make heavy yields of very nutritious hay, and always leave the land in an improved and more fertile condition.

Price subject to change.

BLACK PEAS.—This is the standard variety and most largely grown in this section of Virginia. Is very prolific, makes a fine growth of vine and leaves, and makes a good yield of peas. Price per bushel, \$2.00.

NEW ERA.—An extra early maturing variety of upright growth; good foliage, and an abundance of peas. Not as heavy in forage as others, but recommended where it is desired to get a crop off of the land at a specified time. Price per bu., \$2.25.

WONDERFUL, or UNKNOWN.—This is an old variety, making a remarkable growth of vines which are of the running habit. Will make more foliage than any other cow pea, but on account of its running disposition not easily cut and cured. Requires a full season to mature. Price per bu., \$2.00.

WHIP-POOR-WILLS.—An early maturing variety which is becoming a great favorite. It is upright growing, makes a heavy growth of vine, easily cured. One of the best varieties in cultivation. Price per bu., \$2.00.

CLAY.—A vigorous grower, inclined to run, heavy yielder of hay; a little later in maturity than the black pea. One of the best for hay or soil improvement. Price per bu., \$2.00.

TAYLOR.—A large speckled pea making an abundant growth of vine; good hay, and a heavy yielder of shelled peas. Very popular wherever grown. Price per bu., \$2.00.

EARLY RAMSHORN BLACK EYE.—A large second early black eye pea of splendid quality. A great favorite with truckers and market gardeners as a green pea. Price per qt., 20c; pk., \$1.00; bu., \$3.50.

EXTRA EARLY BLACK EYE.—An extra early strain of the well known black eye pea. Of upright growth, bushy, very prolific in pods; of good flavor, and especially used for early marketing of green shelled peas. Price per qt., 25c; pk., \$1.25; bu., \$4.50.

LARGE BLACK EYE.—A well known large type of the original black eye pea. Later in maturity than Ramshorn and Extra Early, but more prolific and a sure cropper. Price per qt., 15c; pk., 90c; bu., \$3.25.

MIXED COW PEAS.—A choice mixture of the principal peas, which a great many of our farmers think produce a thicker and better crop of hay than any single variety. Also good as a follow crop. Price per bu., \$1.95.

MIXED COW PEAS WITH SOJA BEANS.—For those of our customers who desire a mixture of cow peas and soja beans we are prepared to give them a splendid mixture in proper proportion. It is very desirable to sow soja beans with cow peas, as the beans are upright in growth and help to hold up the peas, besides adding considerable to the nutritive value of the hay. Per bu., \$1.75.

Winter Rye

Largely cultivated for pasturage in winter, for early green food, as a cover crop, and for fallowing purposes in spring. Price on application in season.

Winter Barley

Sown in the fall for winter and spring pasturage. Price on application in season.

Seed Wheat

We carry a full stock of all the leading varieties during seeding season. Price on application.

Canada Field Peas

Canada Field Peas with oats make a very desirable hay. They should be sown in January or early in February to get best results. Sow at the rate of $1\frac{1}{2}$ bushels of Oats, and 1 bushel of Canada Field Peas per acre. Price per pk., 90c; bu., \$3.00.

White Navy Beans

Grown for the dried bean only. Should be planted in June or July in 3 ft. rows. Price per qt., 20c; pk., \$1.40; bu., \$5.00.

Velvet Beans

Velvet Beans make an enormous growth of vines, and are generally used for plowing under as a soil improver. They are generally planted in rows 4 to 5 ft. apart at the rate of about 1 pk. per acre. They are also considered valuable for green grazing. Price per qt., 20c; pk., \$1.00; bu., \$3.00.

Kaffir Corn

This is a very popular forage crop. Makes a heavy growth and is very nutritious. When allowed to mature the grain makes a valuable feed for stock or poultry. Kaffir corn is also sown with cow peas to enable the cow peas to grow up on the corn and make harvesting easier. Price per lb., 5c; bu., \$1.25.

Sorghum

EARLY AMBER SORGHUM.—This furnishes a large yield of very nutritious forage, and is used in the green state or cured. On good land it will yield 2 to 3 cuttings a year. It is highly recommended when quick growing, green food is desired. Price per lb., 5c; pk., 50c; bu., \$1.25.

EARLY ORANGE SORGHUM.—Similar in growth and character to the Early Amber, but considered a heavier yielder. Price per oz., 5c; pk., 50c; bu., \$1.25.



German Millet.

German Millet

German Millet makes a large yield and most nutritious hay crop. Quick growing and most easily cured. Should be sown on good land only, at the rate of $\frac{1}{2}$ to $\frac{3}{4}$ bushel per acre, and should be cut while in bloom before seed hardens. Sow from the middle of May to the end of July. Price per bu., \$2.00.

PEARL, or CAT-TAIL MILLET.—This is a continuous forage plant. Grows from 3 to 4 ft. high. It can be cut and will stool out enormously with rapid growth, and can be continuously cut this way 3 to 4 times each season. Price per lb., 10c.

Canada Blue Grass

Similar to Kentucky Blue Grass, but more hardy and able to resist drought. Recommended for use in mixtures for lawns and pasturage. Price per lb., 15c.

Shallu

This great forage plant makes a tremendous yield of excellent fodder. Will grow 10 to 12 ft. high, and if allowed to ripen, the grain will make splendid chicken food, or can be used for pancake flour. If cut off will stool out from the roots, making 3 to 6 stalks from each plant. Price per lb., 10c; 10 lbs., 60c; 100 lbs., \$5.00.

Milo Maize

This makes a very succulent growth of forage, very nutritious, and of splendid milk producing qualities. Can be cut several times when desired to be used as green forage. Can also be cured. Price per lb., 10c; peck, 75c; bu., \$2.50.



Vetches

HAIRY, or SAND VETCH.—This great forage crop is rapidly becoming a favorite throughout the South. Generally sown with oats, in which combination it yields heavy crops of the very best kind of hay. Sow in September at the rate of 20 lbs. of Vetch and $1\frac{1}{2}$ bushels of oats per acre. It has been customary to sow from 30 to 35 lbs. per acre, but our experience has taught us that by seeding 15 to 20 lbs. with oats, we get much better hay, and have much less trouble in cutting and curing the same. A mixture which has proven very successful in this section is $1\frac{1}{2}$ bushels of rust proof oats, 15 lbs. Hairy Vetch, and 10 lbs. of white bloom crimson clover per acre. We recommend this mixture, and know it will please. Hairy Vetch is a great improver of soil, and wherever it is used, the land is left in much better shape. Price on application.

Buckwheat

A very desirable crop for late summer. Easily grown and affords splendid poultry food. Is also considered an improver of soil. We recommend the seeding of buckwheat and crimson clover together at the rate of 15 to 20 lbs. of crimson clover and $\frac{1}{2}$ bu. of buckwheat per acre. The buckwheat will grow rapidly and shade the crimson clover from the hot sun, insuring a stand of clover at all times. When buckwheat is ripe, it can be harvested and stored away for chicken feed. In this way, you can make two crops from one seeding, and are always assured a good stand of crimson clover which is generally very hard to get in the early seeding.

JAPANESE.—This variety ripens a week earlier than Silver Hull, and kernels are larger, and makes a heavier yield. Price per pk., 50c; bu., \$1.35.

SILVER HULL.—A favorite sort recommended for the fine quality of flour. Price per pk., 50c; bu., \$1.35.

SPRING, or OREGON VETCH.—Adapted for spring sowing, and usually sown with some variety of spring oats. Has the same characteristics as hairy vetch. Per lb., 8c; 100 lbs., \$6.50.

Dwarf Essex Rape

Excellent for grazing for sheep, hogs or any kind of stock; furnishing rich and nutritious pasturage 6 to 8 weeks from time of sowing. Is largely used for green feed for poultry. Can be sown most any month in the year, at the rate of 5 to 8 lbs. per acre. Price per lb., 10c; 50 lbs., \$3.50; 100 lbs., \$6.50.

Teosinte

This is a valuable fodder plant, resembles corn in growth, but with larger leaves and sweeter stalks, which yield enormous crops; if planted on rich soil, can be cut 5 to 6 times a year. Will grow to a height of from 10 to 14 ft. Drill in May or June at the rate of 2 lbs. per acre. Rows 4 ft. apart. Price per lb., 50c.

Spanish Seed Peanuts

We make a specialty of Hand Picked and Hand Shelled Spanish Peanuts for seed purposes. Our stocks are carefully selected, screened to a uniform size, and carefully handled throughout, insuring a seed of highest germinating qualities, and free from imperfect and split peas. Our peanut planters realize the superiority of our Hand Shelled stock over the general run of seed out loss, on the exact quantity required per acre to get a full and uniform stand. Price fluctuates. Current price on application. Price per lb., 11c; per bu. of 60 lbs., \$6.00.



Teosinte.

CYPHERS INCUBATORS



**STANDARD
CYPHERS INCUBATOR**
Fire Proofed-Insurable.

Cyphers Standard Incubators are acknowledged the world over as the best, safest, and surest incubating machines manufactured. Tens upon tens of thousands of them have been sold, and are in successful use in every civilized country on the globe. They are the last word to date in incubator building; not a penny being spared anywhere in their construction to make sure of their doing satisfactory work in all climates under widely different conditions in the hands of all sorts of people. They are fire-proof, insurable, and sold under an absolute guarantee, and if properly taken care of, will last and do good work for a life time. As Cyphers authorized agents, we are in position to offer their Standard INCUBATORS and BROODERS to our trade at strictly factory prices, f. o. b. Petersburg, Va., thereby saving our customers freight and delay in getting their orders filled.

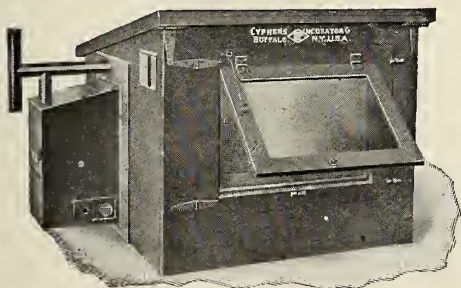
Factory prices on Cyphers Incubators: No. 0, 70 egg size, \$15.00; No. 1, 144 egg size, \$22.00; No. 2, 244 egg size, \$32.00; No. 3, 390 egg size, \$38.00.

CYPHERS BROODERS

Cyphers Brooders are built with a view to durability, efficiency, and accuracy, and are considered the most perfect brooding devices on the market.

Factory prices on Cyphers Brooders: Style "a," Outdoor, \$12.50; Style "b," Outdoor, \$16.50; Style "c," Outdoor, \$18.50; Style "d," Indoor, \$11.50.

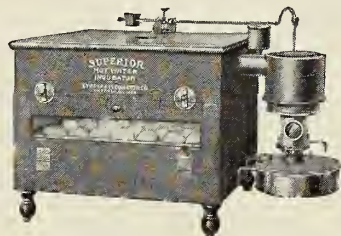
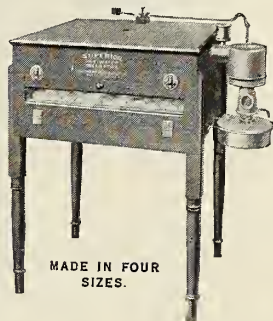
We will gladly mail free of charge Cyphers complete catalogue and book of information to any of our customers on application.



SUPERIOR HOT WATER INCUBATORS

This machine is built by the Cyphers Incubator Co., to meet the requirements of poultry raisers who prefer hot water to hot air incubators. As the name implies, it is a superior machine in every detail, heated by hot water. The water boiler and tank are of heavy weight copper. Lamp has seamless bowl, and burner is best on the market. Incubator case is of wood, attractively finished in golden brown with brass trimmings, and has double walls with air space insulation. Equipped with Cyphers zinc and steel thermostat and knife-edge regulator. Forced water circulation and automatic ventilation. Roomy chick nurseries. The Superior is built in two sizes: 60 to 65 egg capacity, price complete, \$10.00; 120 to 130 egg capacity, price complete, \$14.00.

Each machine fully guaranteed.

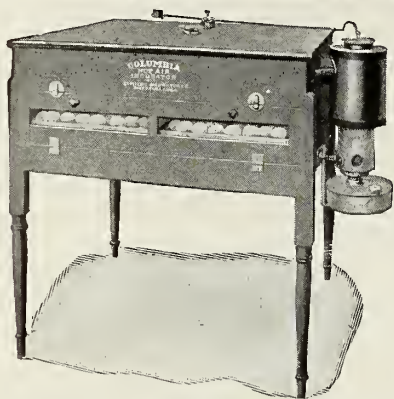


COLUMBIA HOT AIR INCUBATORS

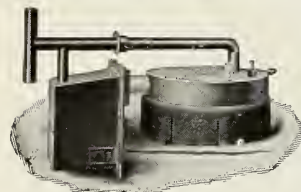
A popular priced, popular sized, and guaranteed hot-air hatcher. Wooden case, attractively furnished in dark green, with brass trimmings and double walls. Seamless bottom lamp bowls, best quality brass burners, zinc and steel Standard Cyphers toggle-joint thermostat and same regulating equipment as used on highest priced



machines. Fume-proof, forced draft heater, asbestos covered and metal banded. Automatic in ventilation and embodies diffusive principle. Roomy chick nursery under egg trays. Made in two sizes: 130-140 egg size, price complete, \$15.00; 240-250 egg size, price complete, \$19.00.



CYPHERS ADAPTABLE HOVER



This self-regulating heating device can be used satisfactorily anywhere that chicks can be safely housed, and is especially recommended for continuous brooding houses containing chicken pens side by side. It is made of non-combustible material throughout, and can be used anywhere without danger of fire.

Price \$8.50



INTERNATIONAL SANITARY HOVER

Can be used anywhere. Can be picked up and carried around with ease, and is ready for use anywhere it may be dropped. This hover is so constructed as to provide a higher temperature at the outer edge, and prevents chicks from crowding. Lamp can be removed without disturbing chicks. The International Sanitary Hover has met with marked approval with the leading and best known poultry raisers throughout the country. Price complete.....\$8.50

CYPHERS PORTABLE HOVER

This is a self-regulating, and self-ventilating portable hover manufactured by the Cyphers Incubator Co., and tested by them with success on their poultry farms. Can be used most anywhere. Constructed throughout of metal with exception of brooding curtain, and with reasonable care will last a life time. Price complete.....\$8.50

Poultry Appliances

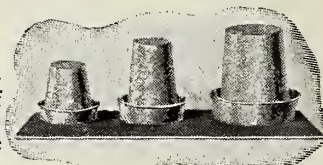
STANDARD WALL FOUNTAINS.—Made of best galvanized iron, and will last many years with proper care. Can be hung on wall or against upright post or placed on the ground.

1 gal. size.....50c 2 gal. size.....75c

CYPHERS DRINKING FOUNTAIN

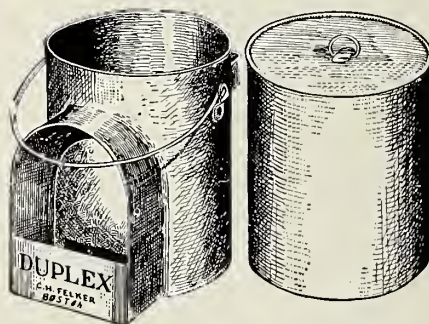
Made of galvanized iron, light of weight, and easily cleaned. Made in 3 sizes:

Small size.....20c Medium size.....25c
Large size.....35c



PEERLESS FOUNTAINS.—A very serviceable and practical poultry fountain, with detachable bottom, making it easy to clean and keep clean. Can be hung on the wall or placed on level ground.

1 qt. size for chicks.....30c
5 qt. size50c
10 qt. size75c



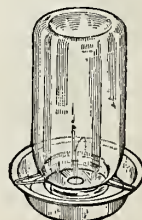
FELKER'S DUPLEX WALL FOUNTAIN.—

Similar to Cyphers Wall Fountain, but reservoir can be removed, and cleaned. Has hood over water trough to keep water clean. Capacity 1 gal.

Price, each60c

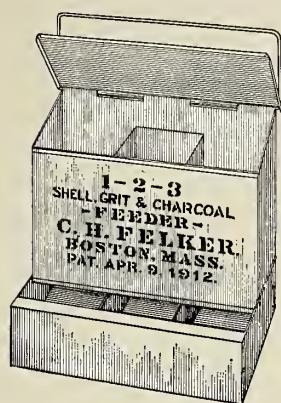
NO SLOP FOUNTAINS.—This is one of the best, cheapest appliance used as a feeder or fountain. They are durable tin pans, constructed to fit any mason fruit jar, and are used for water or food. Very convenient and practical.

15c each. 2 for 25c. \$1.00 per doz.



CYPHERS FOOD HOPPERS.—Made of heavy galvanized iron with two compartments.

Each75c



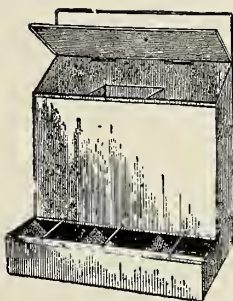
1-2-3 FEEDER.

Made of galvanized iron, and so arranged as to have one, two, or three compartments. A very popular and practical feeder.

Each.....75c

1-2-3 GRIT AND SHELL BOX.—The same as the 1-2-3 feeder; but smaller in size, and especially adapted for feeding beef scrap, shells, charcoal or grit.

Each.....50c



HUB CHICK FEEDER.—Keeps the feed clean and dry. Chickens cannot waste feed. Recommended for brooder service. Each.....30c

CYPHERS GRIT AND SHELL BOX.—A well made, three compartment hopper, used especially for the feeding of grit, shells, scraps, etc. Each.....50c

THE X-RAY EGG TESTER.—A practical egg tester, designed for use on an ordinary hand lamp. Each.....25c

MEDICATED NEST EGG.—A nest egg and lice destroyer combined. Placed in corner of nest under straw keeps the nest sweet and clean. Each.....5c Per dozen.....50c

CHAMPION LEG BANDS.—Very neat, light, strong, and durable. Easily and quickly put on, and guaranteed to stay. 15c per doz. 50 for 50c. 100 for 75c

PERFECT POULTRY MARKER.—Makes a good clear cut without mutilating the web. Each.....25c
Incubator Thermometers tested, 50c each.
Brooder Thermometers tested, 40c each.

DIAMOND EGG BOXES.—For shipping eggs for hatching purposes. Practical, durable, and insures safe delivery of eggs. Prices:

	Each.	Per doz.
15 egg size, single wall.....	15c	\$1.50
15 egg size, double wall.....	20c	2.00
9 turkey egg size, double wall.....	15c	1.50

EUREKA EGG PACKAGE.—Used for shipping hatching eggs. Light, durable and safe. Price: 15 egg size, \$1.75; 30 egg size, \$2.40 per doz.

FARMERS' HANDY EGG CARRIER.—A safe and convenient crate for carrying eggs to market. Holds 12 dozen eggs. Each.....40c

CYPHERS BROODER STOVE.—A very convenient and safe stove for home-made brooders. Very reliable. Each.....\$1.75

LAMP WICKS.—For No. "O" Incubator, 20c per doz.; for No. 1-2-3, 25c per doz.

LAMP BURNERS.—For No. "O" Incubator, 30c; for No. 1-2-3 Incubator, 50c each.

Poultry and Stock Remedies

CONKEY'S POULTRY REMEDIES.—Each medicine is a guaranteed remedy for the disease intended for.

Conkey's Scaley Leg Remedy, 50c per doz.

Conkey's Roup Cure, 25c and 50c boxes.

Conkey's Cholera Cure, 25c and 50c boxes.

Conkey's Gape Cure, 50c per box.

Conkey's Chickenpox Remedy, 50c per box.

Conkey's White Diarrhoea Cure, 25c and 50c per box.

Conkey's Limber Neck Remedy, 50c per box.

Conkey's Lice Powder, 10c and 25c per box.

Conkey's Laying Tonic, 25c per package.

Conkey's Head Lice Ointment—Destroys lice on baby chicks. Small package, 10c; large package, 25c.

Conkey's Lice Liquid—An excellent lice killer and disinfectant for painting roosts. 1 qt. can, 35c; 2 qt. can, 60c.

Conkey's Noxicide—Invaluable for all germ diseases. A great germicide and disinfectant. 1 pt. can, 35c; 1 qt. can, 60c.

Bee Hives

We carry in stock, latest improvements in Bee Hives.

A. I. Root's Dove Tailed, 8 frame, \$4.25 each.

A. I. Root's Dove Tailed, 10 frame, \$4.50 each.

These hives are put up ready for use, painted, foundation starter, sections, and everything complete.

We also carry other bee keepers supplies.

Virginia Grown Nursery Stock

Write us for prices on Virginia Grown Fruit Trees, Shade Trees, Hedge Plants, Small Fruits, etc. We can save you 25 per cent on your nursery order.

Poultry and Stock Foods

Prices on stock foods fluctuate. We will gladly quote lowest current prices at all times on application.

GLOBE SCRATCH FOOD.—A scientifically prepared scratch food without grit or shell. Contains only clean and high-grade grains, free from dust and chaff. The best and most perfectly balanced scratch food manufactured.

10 lb. package.....25c 50 lb. package.....\$1.25
100 lb. bag.....\$2.25

GLOBE CHICK FOOD.—A complete grain food for chicks up to 8 weeks old. Contains only re-cleaned grains with a percentage of granulated bonemeal and charcoal. Produces healthy and rapidly growing chicks.

8 lb. bags.....25c 50 lb. package.....\$1.50
100 lb. bag.....\$2.50

PARK & POLLARD'S DRY MASH.—The originally Lay or Bust food. A complete food for growing fowls and an egg producer for hens. Can be given dry or moistened.

8 lb. bag.....25c 50 lb. bag.....\$1.40
100 lb. bag.....\$2.60

AUNT PATSY'S POULTRY FOOD.—A scientifically prepared dry mash containing in proper proportion everything that a hen should have to produce and increase the production of eggs. Very highly recommended as an egg producer by those who have used it. Prices:

25 lb. bag.....80c 50 lb. bag.....\$1.50
100 lb. bag.....\$2.60

ALFALFA MEAL.—Fresh alfalfa hay ground fine for poultry. Can be used in a mash or alone as a substitute for green grass.

10 lb. package.....25c 50 lb. package.....\$1.00
100 lb. package.....\$1.75

MEAT MEAL, or BEEF SCRAP.—Pure dried ground beef, high in protein, and very essential as an egg producer in winter.

6 lb. package.....25c 50 lb. bag.....\$1.75
100 lb. bag.....\$3.25

POULTRY OYSTER SHELLS.—Re-cleaned and crushed shells for poultry. Ground fine for chicks, or medium for grown fowls.

5 lb. package.....10c 25 lb. package.....25c
100 lb. bag.....60c

POULTRY CHARCOAL.—Aids digestion, promotes health and is indispensable in all poultry yards. Put up in two sizes: fine, for chicks, and medium, for fowls. Prices:

3 lb. package.....10c 10 lb. package.....25c
50 lb. bag.....90c

PEARL POULTRY GRIT.—Manufactured especially for poultry. Very essential to keep fowls in a healthy condition. Size No. 1, for grown fowls; No. 2 for chicks and pigeons.

5 lb. package.....10c 20 lb. package.....25c
100 lb. bag.....75c

GRANULATED BONE.—Pure raw bone, granulated to three sizes: small, medium and large.

6 lb. package.....25c 50 lb. bag.....\$1.50

HEMP SEED.—Largely used for pigeon and bird food.

1 lb.....10c 3 lbs.....25c 10 lbs.....60c 100 lbs.....\$5.00

SUNFLOWER.—Rich food for grown fowls and parrots.

1 lb.....10c 3 lbs.....25c 10 lbs.....75c

KAFFIR CORN.—Splendid food for all poultry. Especially recommended for pigeons.

8 lbs.....25c 50 lbs.....\$1.25

OIL CAKE MEAL (Flax Seed Meal, Old Process).—Used extensively for all kinds of stock, as a conditioner and tonic. Should be used in every stable.

10 lb. package.....25c 100 lb. bag.....\$2.25

SAL VET.—This is the greatest worm destroyer known to the veterinary profession, and should be used by every one having a cow, horse, hog or sheep. It is not only a sure worm remedy, but also a splendid conditioner and tonic. As exclusive agents for this territory, we offer Sal Vet to our customers with an absolute guarantee with each package, or money refunded.

10 lb. pkg.....75c 20 lb. pkg.....\$1.25

40 lb. keg.....\$2.25 100 lb. keg.....\$5.00

BLATCHFORD'S CALF MEAL.—The perfect substitute for milk. Calves are successfully raised and fattened with this calf meal without milk. Recommended and used by all dairymen.

25 lb. bag.....\$1.00 100 lb. bag.....\$3.50

KILGARLIC.—A stock and condition powder for cows, horses and mules. Aids digestion, and promotes health. Guaranteed to kill the taste and smell of onions, garlic and weeds in milk. Increases flow and improving quality of milk, and keeps stock in a healthy condition. Sold on a guarantee.

6 lb. package.....\$1.00 40 lb. bucket.....\$4.00

INTERNATIONAL STOCK FOOD AND TONIC.—The most generally used tonic, food and conditioner for cattle, horses, sheep and swine.

Per pkg.....25c, and 50c Per 25 lb bkt.....\$3.00

BURDETTE'S GREEN SALVE.—An excellent remedy for animals. For galls, kicks, wire cuts, raw sores, nail in foot, swellings, bruises, etc. Sold on absolute guarantee.

Price, 25c, 50c and \$1.00 per box



Healthy birds and lots of eggs, the two big things in poultry raising are made certain by giving

Pratt's Poultry Regulator

100 lb. bags, \$9.00; 25 lb. pail, \$2.50; 12 lb. pail, \$1.25; Pkgs. 50c and 25c.

It builds up vitality, insures sound digestion, sharpens appetite and prevents disease, thus putting birds in condition for heavy egg laying or winning blue ribbons.

Pratts is the original Poultry Regulator of America and is in use by the most successful poultry raisers everywhere.

When regularly used hens lay throughout the year.

It will prevent chicken cholera, gapes, roup, rheumatism, expel worms, prevent leg weakness and egg eating. It will greatly improve turkeys, geese, ducks, pigeons and guineas—insuring quick growth and keep them free from disease.

Don't let ROUP cut your profits. The sure and easy "ounce of prevention" against this dangerously contagious disease is

Pratt's

Roup Remedy

Quickly absorbed by the blood, purifies the system, reduces fever, allays inflammation. The safe remedy for roup, colds, catarrh and all bad weather disease.

When baby chicks come, keep them healthy and growing and bring even the weak ones along by feeding

Pratt's

Baby Chick Food

14 lbs. for \$1.00; packages 50c and 25c.

A largely pre-digested food for baby chicks. Guaranteed to raise every livable chick. Costs a cent a chick for three weeks. Prevents leg weakness, white diarrhoea, "pasting up" and other chick diseases.



If poultry keepers would regularly spray the chicken houses, roosts, dropping boards and utensils with

Pratt's

Poultry Disinfectant

only \$1.00 a gallon, most all their troubles would vanish. This great disinfectant is a real wonder worker in the poultry yard.

Three times as powerful as crude carbolic acid. A sure deodorizer, germicide and liquid lice killer. Use it for roup, colds and other contagious diseases.

We want you to notice the price, \$1.00 per gallon, making it the lowest priced disinfectant on the market. Others of equal strength are usually sold for \$1.50 per gallon.

Half gallon 60c; quart 35c.



More work out of your horses, more milk from your cows, fatter hogs—these are a few of the benefits which come from using

Pratt's Animal Regulator

Always sold on a guarantee that it will satisfy you or money back.

25 lb. pails, \$3.00, are popular with our customers. Packages at \$1.00, 50c and 25c. Get prices on 50 lb. and 100 lb. sacks.

Pratts Sore Head and Chicken Pox Remedy.—50c and 25c.

Pratt's White Diarrhoea Remedy.—50 and 25c.

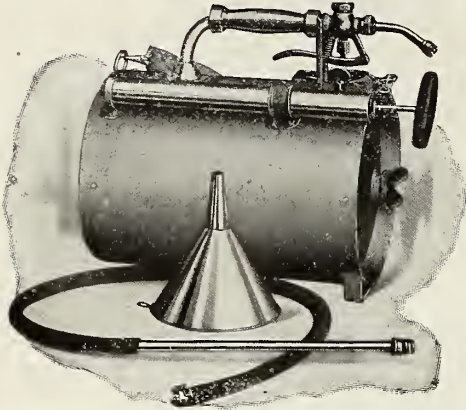
Pratts Roup Remedy, Tablets or Powder.—\$1.00, 50c and 25c.

Pratts Hog Cholera Specific.—50c packages.



There is a Pratt Remedy for nearly every curable poultry and stock disease—guaranteed to satisfy or your money back.

Sprays, Pumps and Devices



LOWELL FOUNTAIN SPRAYER.—This is one of the best compressed air spray pumps manufactured, and we not only recommend, but also guarantee it in every way. It has no intricate parts to get out of order. The spray material does not come in contact with the pump; the tank is thoroughly tested to stand the highest pressure, and will drain perfectly with one charge. We especially recommend this pump for spraying potatoes, cabbage, etc.

Price complete, with spray crook nozzle, 3 ft. hose, and 1 ft. long spraying nozzle, funnels for filling and shoulder straps.....\$5.00

OUR PERFECT BARREL SPRAY PUMP.

—This reliable pump is equipped with a seamless brass cylinder, brass rod, brass plunger and brass screw spout; it has a large air chamber and is a pump of great force and power. It has a suction pipe and strainer, and a churn dash agitator. This machine gives a full stream, fine mist, medium and coarse spray, as desired, and is unexcelled in its fine work of spraying trees, shrubs, vines, etc. Every farmer, dairyman, poultryman and fruit grower should have one of these pumps on his premises, as it can also be used to such great advantage in whitewashing

and disinfecting stables, barns, poultry houses, and in washing windows, vehicles, etc. Price complete with five feet heavy hose and 10 feet extension rod, without the barrel. \$10.00.



"KANT KLOG" SPRAYER

Durable, simple and most easily operated sprayer, giving entire satisfaction; sprays full stream, fine or coarse spray. Recommended for spraying vines, small trees, shrubs, plants, hen houses, nests, etc. Invaluable to farmer, gardener and poultry man.

Price complete, each \$5.00



"THE STANDARD" WHITEWASHING PUMP.—A simple but effective pump for whitewashing barns, stables, outhouses, etc. Easy to operate; works in any bucket, tub or barrel; also sprays trees, shrubs, etc., to perfection. Throws stream three stories high. Pays for itself in one day's work. Guaranteed to give satisfaction.

Price\$4.00

LOWELL GLASS TANK SPRAYER.—The best hand sprayer made—durable, easy to handle and operate. Tank is a quart Mason Fruit Jar, which can be readily replaced if broken. Sprays a fine mist.

Price, each75c

THE LOWELL CONTINUOUS SPRAYER is so constructed that it not only sprays on downward strokes, but also when plunger is drawn back, causing a continuous spray. Made of heavy tin, steel rod plunger.

Price, each75c

"MIDGET" SPRAYER.—A small, durable, hand sprayer recommended for household use for disinfecting purposes.

Price, each40c

DRY POWDER DUSTER.—For dusting Slug Shot and all other powder insecticides in a dry state.

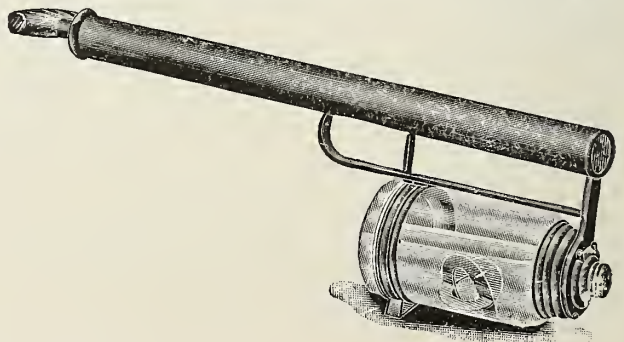
Price, each75c

CAHOON BROADCAST SEEDER

The best hand seeding machine in the world. Sows all kinds of grains, grasses, clovers, peas, etc., and pays for itself in one season.

Price, each\$2.75

THE CYCLONE SEED SOWER.—This is a fine little Seeder at a modest price. Sows any kind of seed evenly, as well as fertilizer, bone and ashes, and pays for itself in a very short time. Price, each\$1.25



Luther Burbank's Productions



Everybody has heard of Luther Burbank and his wonderful productions, and contributions to the Horticultural World, and it is with pleasure that we announce to our customers that we have been made sole distributors of Luther Burbank's productions for this section, and we give below a list of the varieties of Burbank's Flowers and Vegetables which we will carry in stock, and offer to our trade. These productions are original Burbank strains, and are put up in sealed packages, bearing Luther Burbank's fac-simile which is an absolute guarantee of the original Burbank production. Everyone with a garden, no matter how small, should plant one or more of Burbank's Flowers.

Burbank's Vegetables

THE BURBANK "CHRISTMAS" MELON.—

This is a winter muskmelon, very good to eat after September 1st to January 1st. Ripening in the early part of the above period. Melons of medium size, rough skin, very thick rich meat. When ripe may be picked, and will keep from two to three months in a cool, dry place, furnishing a good melon through the winter months. Best suited for growth in dry soil, and like all melons, requires a good amount of fertilizer. Price: per package, 10c.

BURBANK'S SWISS CHARD. — Delicate, sweet greens, very easily grown and affording a continual supply of leaves. The Burbank Chard has very long, white stalks like celery. These and the leaves make the most excellent sweet greens when cooked like other greens. Price: per package, 10c.

BURBANK'S IMPROVED BANTAM CORN.

—A great improvement on the Ordinary Golden Bantam. The ears are much larger and is a great bearer, producing three to four ears to each stalk. The kernels have a delicate flavor, melting tenderness, remaining so longer than other varieties. Can be planted early. Price: per package, 10c.

BURBANK'S EARLY SWEET CORN.—

Originated several seasons ago by Mr. Burbank, who describes its advantages as follows: "This corn has been selected with extreme care for many years, so that it is a remarkably uniform corn. The ears are unusually large, and corn is sweet, plump, and white. Prolific, bearing two well filled ears to the stalk. This is the earliest corn that I know of in the world. Price: per package, 10c.

THE NEW BURBANK EARLY TOMATO.—

Describing this tomato Mr. Burbank says: "The earliest, smoothest, largest and most productive of all early tomatoes. It is of a bright red, the flesh being firm and of superior quality. The plants resist disease in an unusual manner, and unlike most early tomatoes, it produces heavily all summer. A fine home or market tomato, and a fine keeper and shipper. Per pkg., 10c.

BURBANK'S GIANT PEPPER.—The most recent development in Mr. Burbank's work on peppers. Mr. Burbank declares this new giant pepper to be "The largest, best formed, most productive sweet pepper so far produced. Price: per package, 10c.

Burbank's Flowers

BURBANK COSMOS (Lady Lenox Type).—

One of the newest and best varieties of the rose-pink Cosmos, having blossoms of an intense rose shade. The plant, on account of its rank growth almost becomes a shrub and the profusion of daisy-like flowers cover it in an almost solid mass when grown in beds. Price: per package, 10c.

BURBANK'S COREOPSIS (Golden Wave).

—This is an annual, producing heavy daisy-like flowers of golden yellow in great masses. Are especially desirable both for bedding and as a border plant. Its blooming period is long, extending from early in summer until late in the fall. Price: package, 10c.

BURBANK'S IMPROVED "RAINBOW" CORN.—

This is one of the most wonderful of Luther Burbank's creations. One can see in this the distinct change that has been made from the common field corn to the most exquisitely tinted and colored decorative plant. Leaves are variegated with bright crimson, yellow, white, green, rose and bronze stripes. "Rainbow" Corn has wonderful possibilities to get decorative effects. It can be planted so as to hide fences or unsightly objects; placed in masses in the park or on the lawn to get all its artistic effect; or grown in pots or tubs for porches or even interior decorations. It is hardy, will grow easily without any experience, and requires but very little care. Price: package, 25c.

NEW GIANT BURBANK CALENDULA (Marigold).—The flowers are from 3 to 3½ inches across, mostly double, and are borne on unusually vigorous plants in greatest profusion. A great improvement on the old type. Price: pkg., 10c.

BURBANK'S NEW AFRICAN ORANGE DAISY.—Mr. Burbank has grown this South African plant extensively for several years and now finds his selection one of the best bedding plants in existence. Its great orange gold daisy-like flowers are produced constantly for months in unsurpassed profusion. Ideal for borders or beds. Price: package, 10c.

BURBANK'S CRIMSON ESCHSCHOLTZIA (California Poppy).—Mr. Burbank has taken the golden California Poppy and by selection has produced a crimson poppy of marvelous beauty, blooming throughout a long season. Perhaps no other achievement of Mr. Burbank illustrates his marvelous power of perception more than the production of this flower. Taking a California Poppy, which had the slightest suggestion of Crimson, he has produced and fixed this beautiful crimson poppy. One of the most popular of the Burbank flower creations. Price: pkg. 10c.

BURBANK'S GIANT CRIMSON MORNING GLORY (New Imperial Carmine).—One of the wonderful Japanese Morning Glories which, unlike most of this class, will grow most anywhere, and blooms abundantly throughout the summer. Most gorgeous rosy-carmine flowers, three inches across, with pure white throat. Price: package, 10c.

BURBANK'S TULIP POPPY.—Most brilliant fire crimson. Always true from seed. Price: package, 10c.

BURBANK'S POPPY.—Many beautiful shades. This has been pronounced the best of all Shirley Poppies heretofore introduced by Luther Burbank. Price: package, 25c.

BURBANK'S NEW GIGANTIC EVENING PRIMROSE.—By far the largest of all the evening primroses, one single petal being as large as the whole flower of most other varieties of primroses. The blossoms are pure white, sometimes nearly a foot and a half in circumference, perfectly regular and flat. Produces an enormous amount of blossoms and continues to bloom for months in succession. Grown with the utmost ease and is suited with almost any soil. Price: package, 10c.

BURBANK'S GIANT ZINNIA.—This new gigantic strain has flowers three or four times as large as the ordinary Zinnia of the most brilliant colors in a variety of quaint shadings of scarlet, pink, salmon, yellow, white and bronze. A huge chrysanthemum like flower, blooming continuously through the summer until late autumn. Price: package, 10c.

BURBANK'S FRAGRANCE VERBENA.—Low spreading growth. Single plants of good size will cover a space three to four feet in diameter and furnish an abundance of very fragrant flowers throughout the season. Like sweet peas, the more the flowers are picked the better. Without exception, the finest Verbena known. Price: package, 10c.

What is the Matter With My Land, and How Can I Cure It?

We have had this question put to us so often that we feel justified in saying a few words on the subject, based on our own observations and experience in various soils, both in Germany and this country.

A productive soil is not a dead body, but a living one, and as such is, like human life, animal and plant life, subject to many diseases, and a practical farmer should know what kind of medicine to apply to cure the various ailments—for instance:

WE HAVE LAND SUFFERING FROM CONSUMPTION—

Sickly looking and pale in color—such land will not hold water, it is poor in vegetable matter—humus—and some farmers will claim that such land cannot be made to hold manure or fertilizer, and consequently cannot be cured. This is wrong; consumptive land can be cured by increasing the water holding capacity of same.

TRY THIS EXPERIMENT—

Fill a funnel with this consumptive sandy soil, pour some water on this soil in funnel, note how quickly the water will filter through soil and funnel, also note the small amount of water retained in soil; now take same quantity of same soil, mix with one-third quantity of clay, put in funnel and pour water on it as before, and you will find the soil will hold nearly double the quantity of water as in the first sample before running through the funnel; now again, take the same soil with the one-third clay, and add one-third quantity of vegetable matter or humus, add water as before and you will note that this soil will hold nearly three times as much water as the first sample, and about twice as much as the second; and when you remember that plants cannot take solid foods—plant foods must be soluble in water—you can readily see how important it is to increase the water holding capacity of your soil, as before mentioned. If, in curing your consumptive land, you cannot obtain the clay mixture through deep plowing, give the land plenty of humus through cow peas and german clover, and should it get sour through an over abundance of vegetable matter, give an application of from one to two thousand pounds of lime, and same will promptly correct the acidity.

OTHER LANDS SUFFER FROM TORPID LIVER—

This is generally a heavy clay soil, with little sand and no humus, and always a closed surface after a rain; plants in this land die from suffocation, because the air cannot penetrate to the roots. Doctors prescribe calomel for human beings suffering from this disease—the farmer should use the subsoil plow, plenty of lime, german clover and cow peas, and if his bank account allows, he should tile drain such land and make of it a most productive grass and clover land. In sowing grains, grass or clover on such land the surface should not be finely pulverized, but left open in a lumpy condition, to prevent the surface becoming hard and shining after the rain.

Remember that land, being a live body, must breathe, the pores must be kept open, and a closed surface on soil is as detrimental to its physical condition as closed pores are to the human body. By allowing the surface of your land to bake and get hard, you destroy the capilar attraction of the soil, the pulsating action of its breathing, which means its capacity and ability to breathe and draw the moisture, not only from the atmosphere, but from the subsoil as well.

FLOWER SEEDS

ACROCLINIUM—Everlasting (A).—A very pretty, half hardy annual, producing white and rose-colored double daisy-like flowers, about 1½ inches in diameter. These are the "Immortelles," so desirable for wreaths and winter bouquets. Height, 15 inches.

Mixed Colors—Pkt., 5 cts.

AGERATUM (A).—A beautiful hardy annual. The flowers are borne in dense clusters and are very useful for bouquets. The plants are very attractive in the garden, being covered with bloom nearly all summer.

Mixed Colors—Pkt., 5 cts.

SWEET ALYSSUM (A).—A hardy annual which begin to flower when very young, and is literally covered almost all the season with its sweet white flowers. It is especially adapted to borders or for rock work in the summer, and may be used effectively in window boxes for winter blooming. Pkt., 5 cts.

AMARANTHUS (A). (Love Lies Bleeding).—These plants afford brilliant contrasts of color, being useful for tall borders and groups, also where foliage effects are desired. The leaves and stems are of different shades of red, blended with green; two to three feet high. Pkt., 5 cts.



Antirrhinum.

ANTIRRHINUM—Snapdragon (A). — Well known, showy and useful border plants, producing flowers of a great variety of brilliant and handsome colors. Very effective in beds, succeeding in any good garden soil.

Mixed—Pkt., 5 cts.

ASTERS (A).—These well-known, beautiful and popular annuals are very desirable for bedding, being in bloom when most other plants are over. Very useful for cut flowers and for bouquets.

Victoria Mixed.—Beautiful and popular annuals, desirable for beddings, being in bloom when most other plants are over. Very useful for cut flowers and baskets. Pkt., 10 cts.

Dwarf Chrysanthemum Flowered.—One of the best Dwarf varieties. Of a great assortment of rich colors. Pkt., 5 cts.



Aster.

German Quilled (China Aster).—The familiar double Aster with quilled petals. Exceedingly showy and excellent for cutting for vase decorations. The large, brilliant, daisy-like flowers with yellow centres are produced in profusion. Pkt., 5 cts.

BALSAM—Touch-Me-Not (A).—Also known as "Lady Slipper." A tender annual with brittle stems and foliage. Grows about 12 inches high. Flowers both single and double, in bright colors and variations; are wax-like and very attractive. No flower is more easily cultivated, and it succeeds in most any good soil.

Double Mixed.—Pkt., 5 cts.

BACHELOR'S BUTTONS—Globe Amaranth (A).—A well known and popular everlasting flower which forms bushy plants about 2 feet high, and bearing sometimes hundreds of flowers. Excellent as border plants, and very useful for winter decorations. If cut when well matured will retain their beauty throughout the winter.

Mixed.—Pkt., 5 cts.; oz., 10 cts.; ¼ lb., 30 cts.

CALENDULA—Pot Marigold (A).—Very hardy annual, one foot high. Has showy flowers blooming until frost and producing a fine effect in borders. It is of easy culture and is desirable for rather inferior soils, where less sturdy flowers do not thrive.

Mixed Varieties.—Pkt., 5 cts.



Canterbury Bells.

CARNATIONS (P).—These well-known flowers are easily grown from seed, and very free blooming, the flowers being bright-colored and with a most delicious clove-like fragrance. Excellent bloomers in the garden or for winter flowering.

Marguerite.—An extra vigorous race, especially adapted for out-of-door culture. The plants are trim in habit, perpetual and flower abundantly in 5 months from sowing the seed. They are highly fragrant, and have beautiful double flowers. Pkt., 5 cts.

Double Mixed.—A mixture of all colors and types. Pkt., 10 cts.

CANDYTUFT (A).—Popular favorites, flowering profusely the whole summer. Very valuable for edgings and borders, fairly covered with masses of white and various colors. Height 1 foot. Of easy culture. **White.**—Pkt., 5 cts. **Crimson.**—Pkt., 5 cts.

Fancy Mixed.—Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.

CALLIOPSIS OR COREOPSIS (A).—Peautilf showy summer bedding annuals with large bright flowers of golden yellow, varied with rich brown. Excellent for cutting and decorations.

Mixed.—Pkt., 5 cts.; oz., 15 cts.; $\frac{1}{4}$ lb., 50 cts.

CANTERBURY BELLS—Campanula, Cup and Saucer (A).—Handsome, hardy biennial of stately growth, rich color and profuse bloom. Succeeds best in light, rich soil and in the fall should be transplanted or thinned to 18 inches or 2 feet apart and given some protection in severe winter weather. Has large, bell-shaped flowers which are strikingly effective; colors white, and various shades of violet, rose, lilac and blue. Height, 2 to 4 feet. One of the wild forms of Campanula is the "Blue Bells of Scotland." Pkt., 5 cts.

CELOSIA—Cock's Comb (A).—A half hardy annual, growing 6 to 8 inches high, bearing a wide wavy blossom that resembles a Cock's Comb. Fine for massing or border work. Pkt., 5c

CENTAUREA, GYMNOCARPA—Dusty Miller (A).—Valuable because of its silvery foliage, and graceful drooping habit of growth. Half hardy perennial; one-half to two feet high. Pkt., 5 cts.

CHRYSANTHEMUM (A).—These annual Chrysanthemums have a charm of their own. The blooming season is from very early summer until frost, and their gay colors make beds or borders attractive during those hottest weeks of summer when flowers are apt to be scarce.

Mixed Varieties.—Pkt., 5 cts.

COLEUS (A).—Probably the best known and most popular of ornamental foliage plants. The leaves are of many shades of color and have a rich velvety appearance of extraordinary beauty. No lawn should be without these decorative plants. Tender perennial.

Mixed.—Pkt., 10 cts.

COSMOS (A).—These well-known flowers are of easy culture and are almost indispensable for cutting and garden decorations, their lovely blossoms being produced in greatest profusion after most other flowers have succumbed to frost. Few flowers have grown more into popularity in late years than the Cosmos, and we recommend them to all wanting large plants in their gardens.



Centaurea.

Mammoth Mixed.—The flowers are double the size of the old, large flowering Cosmos, measuring from 3 to 4 inches across. The petals are large, overlapping, forming perfectly round flowers, deeply ribbed and of good substance. Pkt., 10 cts.

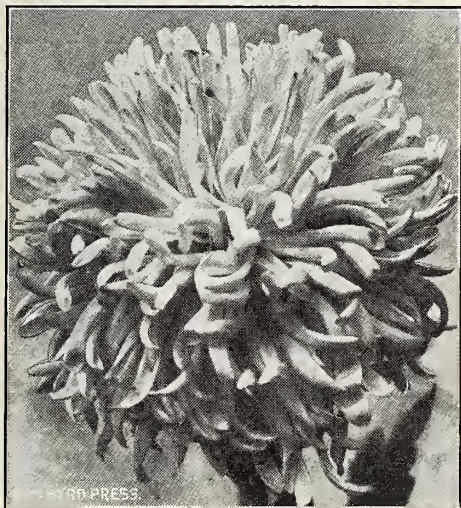
DAISY (P).—These are charming little plants for edging and borders. The Daisy has been so far improved by selection and careful cultivation that good seed will give at least 80 per cent. of double flowers that are as large as any of the named sorts that are propagated by the division of the roots and are sold at high prices. The plants bloom well in the house and are splendid for early spring and summer flowering when planted in a slightly shaded situation. Tender perennials, about 6 inches high. Pkt., 10 cts.

DIGITALIS, OR FOX GLOVE (P).—A stately, old-fashioned border plant affording dense spikes of brilliantly colored flowers which are terminal and half as long as height of the plant. Colors, white, lavender and rose. Does not usually bloom until the second year. Thrives best in cool, shady locations.

Fine Mixed.—Pkt., 5 cts.

DIANTHUS OR PINKS (P).—These popular flowers, commonly known as Chinese and Japanese Pinks, have been for a long time very popular, and deservedly so. In diversity of rich and beautiful markings they have but few rivals, and in ease of culture, freedom of bloom and almost certain satisfactory results, they stand close to the Nasturtium. Hardy biennials blooming the first year from seed. So easily grown from seed as to be rarely treated as biennials. Seed may be sown in the open ground any time in May.

Chinensis.—The familiar old Chinese or Indian Pink, easily grown and very showy. Our mixture contains a large assortment of varieties. Pkt., 5 cts.



Chrysanthemum.

Plumarius.—The old-fashioned garden favorite. All the single flowered varieties in one mixture. Pkt., 5 cts.

ESCHOLTZIA—California Poppy (A).—The beautiful State flower of California. It blooms almost continuously throughout the season. A bed of these in full bloom gives a brilliant color effect. The foliage is finely cut and has a bluish tinge, delicate and very attractive. They are of the easiest culture. Can be sown in any soil, but the better the soil the larger the plants and blossoms. It is best to sow the seed in the garden where the plants are to remain, as they do not transplant easily. Pkt., 5 cts.



Dianthus.

FORGET-ME-NOT—Myosotis (P).—The favorite old border plant that succeeds best in moist situations. It comes into blooming early and the little star-shaped flowers appeal to every heart. Hardy perennials. Pkt., 5 cts.

FOUR O'CLOCK—Marvel of Peru (A).—A well-known favorite plant, bearing freely funnel-shaped white, red and striped flowers, which open about four o'clock in the afternoon, remaining open all night; and usually are closed before noon the next day. Sow seed in spring in open ground in any good garden soil. The plants should be given plenty of room, about three feet apart. Pkt., 5 cts.

GAILLARDIA (A).—A very showy, hardy, garden plant, with brilliant flowers in scarlet and yellow, blended and shaded. Blooms freely from early summer till autumn. Grows one and one-half to two feet high, and the blossoms are borne on long, slender stems. Pkt., 5 cts.

HOLLYHOCK (P).—Entirely different and more beautiful than the plant of twelve years ago, being much more compact in growth, the flowers larger, more richly colored and of better form. For a background to a flower garden nothing is better. Height 5 feet. Tie to stakes if the stalks show a disposition to fall. The double varieties are the most desirable.

Double Mixed Varieties.—Pkt., 5 cts.

LARKSPUR (A).—The Larkspur is one of the handsomest and most useful of plants. The colors are extremely beautiful and in mixed borders its profuse masses of purple, white and red show splendidly, and for large gardens is invaluable. Height 12 inches.

Double Dwarf Varieties Mixed.—Pkt., 5 cts.



Petunias.

LOBELIA (A).—Profuse blooming little plants, of great value for edging, hanging baskets or vases. It is completely covered with flowers for a long time. If given plenty of water they may be kept in flower all summer. Pkt., 5 cts.

LOVE-IN-A-MIST—Nigella (A).—A hardy annual one-foot high, with finely cut foliage. Oddly shaped blossoms in blue and white, and curious seed pods. Of easy culture. Pkt., 10 cts.

MARIGOLD (A).—A hardy annual, shrubby plant, in dwarf and tall varieties, growing from 6 inches to 3 feet high. Foliage bright green, deeply cut, and graceful. The flowers are various shades of yellow and brown. The tall varieties are very valuable for large bedding or background work, and the dwarf varieties for borders. No flower garden seems complete without this fine old-fashioned plant.

African.—The best tall variety with large, double blossoms. Pkt., 5 cts.

Dwarf French, Double Mixed.—Pkt., 5 cts.

MIGNONETTE (A).—This popular little flower is well known as one of our most fragrant plants, and a universal favorite. If sown at intervals in spring and early summer it will bloom until killed by frost. Thrives best in a cool temperature. Pkt., 5 cts.

NASTURTIUM (A).—Probably the most popular and easily grown flower in our list, and remains longer in bloom. In favorable soil the flowers are produced in abundance throughout the season. Nasturtiums prefer dry, rather rocky, soil, such as we usually call "poor" soil,

and bear their flowers in such locations in greater profusion than in a rich garden, where they run too much to leaves.

Dwarf Varieties Mixed.—This mixture contains all of the choicest and prettiest flowers of the Dwarf variety. The plants form a small, round bush, 12 to 16 inches high, which is a mass of blooms all summer. Pkt., 5 cts.; oz., 10 cts.; $\frac{1}{4}$ lb., 20 cts.; lb., 50 cts.

Tall Varieties Mixed.—This mixture contains all of the choicest and prettiest flowers of the tall variety, are of quick growth, covering a whole hedge or trellis in a short time. The brilliant blossoms almost cover the plant from top to bottom. Pkt., 5 cts.; oz., 10 cts.; $\frac{1}{4}$ lb., 20 cts.; lb., 50 cts.

PANSY (P).—No description is needed of these little favorites, and it would be hard to find a garden whose charm is not in a large measure dependent upon their marvelous coloring.

Superb Pansy Mixture.—This is a mixture of all the giant flowering varieties, all the plain colors, faced sorts, ruffled edged and rare sorts, also the varieties exquisitely striped. The seed is saved from the most famous pansy gardens, from exhibition flowers. These pansies are wonderfully beautiful in every way and the very best there are. The small difference in the cost of this seed over the other seed is covered one hundred-fold in satisfactory results to the grower. Pkt., 20 cts.

Giant Trimardeau Mixed.—The largest flowering type of Pansy called the French strain. The top petals are larger than the three lower ones and are beautifully marked. The plants are vigorous, compact growth, with immense, three-blotched flowers. Pkt., 10 cts.



Poppies.

Fine Large Flowering Mixed Pansy.—This seed is saved from very good varieties, the flowers are small in comparison with the fine sorts but the colors are good. Pkt., 5 cts.

PETUNIA (A).—There is no bedding plant of easier culture than the Petunia, and few that make a gayer appearance when in full bloom. They are easily grown and very popular for bedding. They thrive best in a warm, sunny location. The shape of the flower is similar to that of the Morning Glory. Sow the seed thinly where the plants are to remain, or for early blooming sow in the house in boxes.

Single Mixed.—Pkt., 5 cts.

POPPY (A).—Hardly any class of plants afford the same brilliant colorings and showy display. They are of easy culture, the seed being sown where they are to remain. Thin the plants 6 to 12 inches apart.

Carnation Flowered.—Large, showy, double flowers of magnificent colors. Pkt., 5 cts.

Single Mixed.—All the fancy and named single varieties mixed. Pkt., 5 cts.

Double Mixed.—All the fancy and named double varieties mixed. Pkt., 5 cts.

PORTULACA (A).—Low-growing or creeping tender annual, 6 to 8 inches high, and bearing glossy, cup-shaped blossoms in very brilliant and gorgeous colors. The seed germinates slowly and should be started under glass or when the weather is hot. These flowers love the sunshine and do best on rather dry ground.

Mixed.—This is an extra fine strain with very large blossoms and splendid colors. Pkt., 5 cts.



Scarlet Sage.

PHLOX DRUMMONDII (A).—One of the prettiest and most popular of garden annuals. Makes very attractive beds, and continues to bloom throughout the summer. Sow in April, in open ground, or can be started earlier indoors.

Grandiflora Large Flowering Mixed.—A great improvement on the common type, both heads and florets being nearly twice as large. Pkt., 10 cts.

Extra Choice Mixed.—This mixture is unexcelled for profusion of bloom and wide range of brilliant colors. Pkt., 5 cts.



Sweet William.

PRIMROSE (A).—Green-house or pot plants, bearing trusses of large single or double blossoms in bright colors, as well as soft tints. Sow the seed in April or May for winter blooming. Pkt., 5 cts.

RICINUS—Castor Oil Plant (A).—Luxuriant rapid-growing annuals with palm-like leaves. Excellent for background or centre of beds of foliage plants, the effect being especially striking after the brilliantly colored fruit is formed. Pkt., 5 cts.

SALVIA SPLENDENS—Scarlet Sage (A).—A well known favorite bedding plant which bears magnificent spikes of scarlet flowers from July to October. Although perennial, it blooms the first year from seed, and there is really no flower that can rival it in splendid color. Excellent for cutting. Pkt., 10 cts.

SENSITIVE PLANT (Mimosa) (A).—Curious and interesting little plants with pinkish white flowers. The leaves close and droop when touched. Pkt., 5 cts.

SCABIOSA (Mourning Bride or Sweet Scabious) (A).—Have perfectly double flowers, are useful for cutting, they are gracefully borne upon long tender stems well above the foliage and makes a beautiful cut-flower, height 2 feet. Pkt., 5 cts.

STOCKS, DWARF GERMAN—Ten Weeks (A).—Desirable for bedding or pot culture. They bear an immense quantity of fragrant blooms, each plant forming a perfect bouquet, and are splendid for cutting. Pkt., 5 cts.

SWEET WILLIAM (P).—A beautiful class of hardy-free blooming plants of extreme richness and diversity of colors. Produces a fine effect in beds or mixed flower borders. Pkt., 5c.



Sweet Peas.

SWEET PEAS (A).—(When ordering pounds by mail, add for postage.)

Superb Mixture.—This is the best possible mixture that can be made, combining carefully considered proportions. It comprises all of the finest new and large flowering, named varieties of every shade and color. Each is the very choicest of its class, grown separately and mixed by ourselves. It is the finest mixture possible and cannot be surpassed at any price. Pkt., 5 cts.; oz., 10 cts.; $\frac{1}{4}$ lb., 30 cts.; 1 lb., \$1.00.

Choice Mixed.—A good mixture of standard sorts and will afford a splendid variety of blooms and a wide range of assorted colors. Pkt., 5 cts.; oz., 8 cts.; $\frac{1}{4}$ lb., 25 cts.; 1 lb., 75 cts.

Superb Spencer Mixture.—A new race or type of sweet pea with extra large flowers, fully double the size of the older forms under good cultivation. The Spencers have wavy and fluted-edged petals, which with their rich coloring give an almost orchid-like appearance. The Spencer type will not stand careless cultivation, but if you give them careful cultivation, they will fully repay you for the extra trouble by their exceptional size and beauty. This is a splendid, well-blended mixture of all true Spencer types only. All colors, mixed. Pkt., 10 cts.; oz., 15 cts.; $\frac{1}{4}$ lb., 50 cts.; 1 lb., \$1.75.

VERBENA (P).—These well-known flowers are splendid for beds or massing. Flowers of most brilliant colors, blooming from early summer till late in the fall. Verbenas grown from seed are always thrifty and do not rust. Sow early in house, or out of doors in April. Pkt., 5c.

WALLFLOWER (P).—This is a fine bedding plant, but it is more often grown as a pot-plant and for this purpose is well adapted. The flowers are very fragrant and usually of various shades of yellow, brown and reddish brown. An old-fashioned flower which is always popular. Sow early in the year in boxes and transplant. Pkt., 5 cts.

ZINNIA (A).—For gorgeous summer and fall display the Zinnia is unsurpassed, the flowers are perfectly double, resembling Dahlias, and almost every shade of color. For bedding and massing they are particularly suitable.

Tall Double Mixed Colors.—Pkt., 5 cts.

Dwarf Double Mixed Colors.—Pkt., 5 cts.



Zinnias.

Vines or Climbers

CYPRESS VINE.—A tender climbing annual, with soft fern-like foliage and small star-like flowers. Height about 15 ft. Pkt., 5 cts.

MORNING GLORY.—One of the most popular of all climbers. They grow rapidly to a height of about 15 ft. and bear abundantly brilliant flowers of various colors.

Mixed Varieties.—Pkt., 5 cts.

Imperial Japanese.—Pkt., 10 cts.

MOON VINE OR EVENING GLORY.—Beautiful rapid climbers, bearing large white flowers which open in the evening and on cloudy days. Pkt., 10 cts.

DOLICHOS OR HYACINTH BEANS.—A tender climbing annual, rapid growth and splendid for covering a trellis. Pkt., 5 cts.

Gourds

NEST EGG.—In size color and shape, like a hen's egg. Vines make good screens. Pkt., 5 cts.

DIPPER.—The handles grow curved if on the ground, straight if on a frame. Pkt., 5 cts.

FERTILIZERS

FARMER'S SOLUBLE BONE HIGH GRADE TOBACCO

Analysis.—Acid Phosphate, 8%; Ammonia, 3%; Potash 2%.

A splendid fertilizer for truckers use, also recommended for potatoes.

Price per 200 lb. bag.....\$ 3.75
Price per ton 36.00

BEEF BLOOD AND BONE

Analysis.—Acid Phosphate, 8½%; Ammonia, 2%; Potash, 1%.

A moderate priced guano for truck and general farming purposes.

Price per 200 lb. bag.....\$ 3.00
Price per ton..... 28.00

OWL BRAND SPECIAL TOBACCO

Analysis.—Acid Phosphate, 9%; Ammonia, 2½%; Potash, 2%.

One of the standards for tobacco, also highly recommended for truck.

Price per 200 lb. bag.....\$ 3.50
Price per ton 34.00

OWL BRAND

Analysis.—Acid Phosphate, 8%; Ammonia, 2%; Potash, 2%.

A well known and popular brand for general use.

Price per 200 lb. bag.....\$ 3.35
Price per ton 33.00

AMMONIATED TOBACCO SUPER-PHOSPHATE

Analysis.—Acid Phosphate, 10%; Ammonia, 2%.

Manufactured expressly for the tobacco section. Will be largely used by tobacco growers this season.

Price per 200 lb. bag.....\$ 2.25
Price per ton 22.00

16% ACID PHOSPHATE

Price per 200 lb. bag.....\$ 1.85
Price per ton 18.00

PULVERIZED SHEEP MANURE

We recommend this finely ground pulverized sheep manure for all crops, being a natural fertilizer, it does not burn or sour on the land. Is quick in action, and effective in results. Recommended especially to our truckers. Pulverized Sheep Manure carries about 3% of Potash, which makes it especially valuable for this season, owing to the scarcity and very high cost of mineral potash.

Price per 100 lb. bag.....\$ 1.75
Price per ton 30.00

Owing to the unsettled condition of the fertilizer market, prices on fertilizers are made subject to change without notice.

We carry a number of other brands and analyses, and will gladly quote on anything obtainable in the fertilizer line.

Everybody has heard of Luther Burbank and his wonderful production, and contributions to the Horticultural World, and it is with pleasure that we announce to our customers that we have been made sole distributors of Luther Burbank's production for this section.

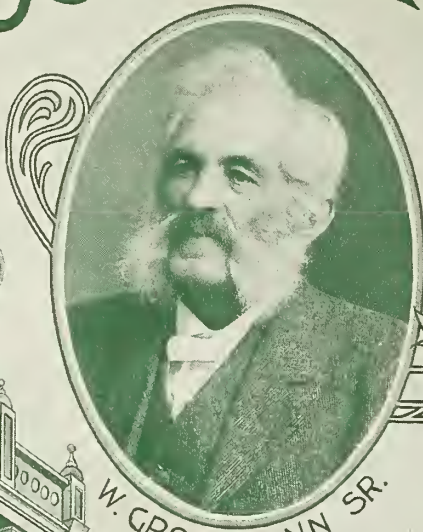
BURBANK'S FLOWER GARDEN for \$1.00

No matter how modest your garden is, you should and can afford the exclusive Burbank features for Cottage Garden as well as Conservatory.

LUTHER BURBANK'S SELECTION OF HIS OWN SEEDS

12 varieties in 12 packages, having a separate retail value of \$1.80, put up in an attractive box for the sum of \$1.00. Enough for a garden of extraordinary character and beauty.

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